MISSOURI BOTANICAL GARDEN
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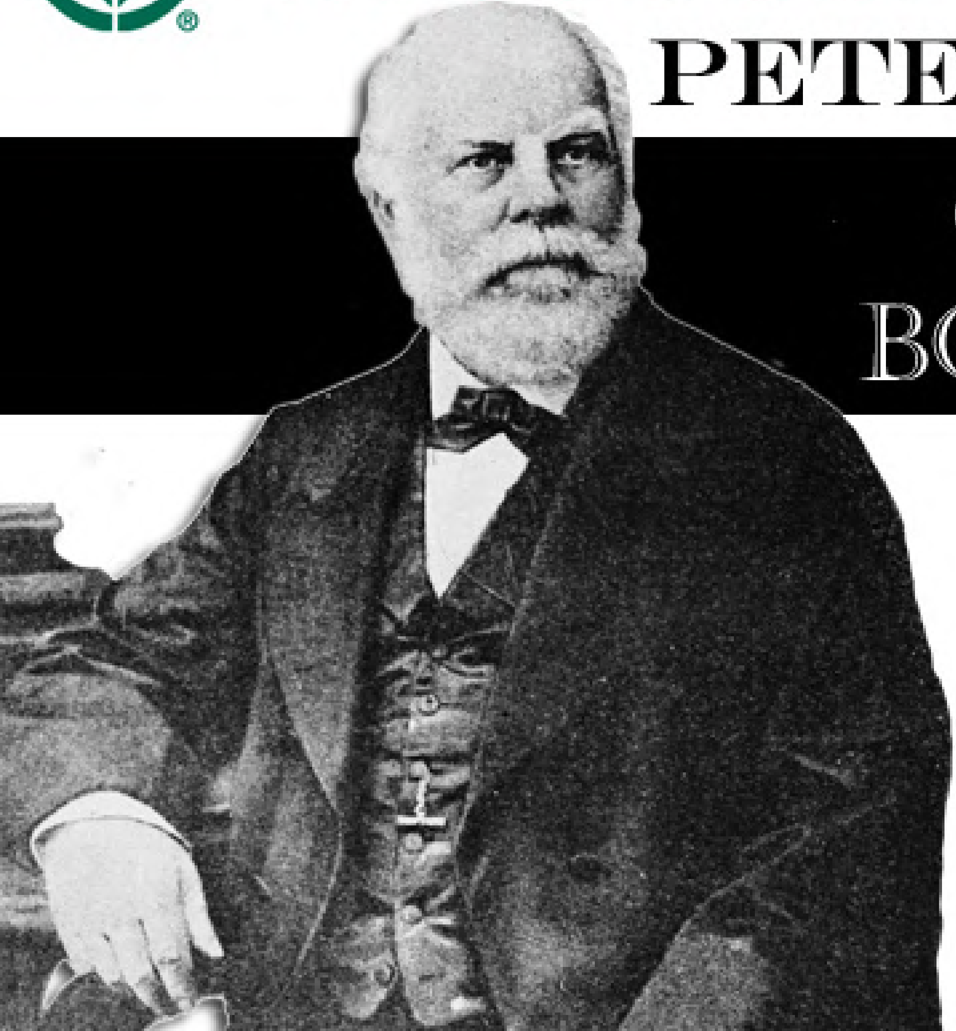
GEORGE ENGELMANN BOTANICAL NOTEBOOKS



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

SHOUT
SHARE
IT

Callitriche Asae Grayi

macrocarpa ~~geminata~~

heterophylla	linearis	brevifolia
Kentucky Short – Hb Gray 1.0 – 1.0	Saco 1.1 – 1.1 Tuckerman — — — 1.3 – 1.1 does it belong here?	
Westchester, Ind Hb. Short 1.0 – 0.9		
California? Bigelow 1.0 – 0.9		
San Luis Potosi Parry 1878 max. 1.2 – 1.0 mm		

798

ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

798A

so much interest among scientific men.* And such was his energy that, almost unaided, he gathered in a few weeks the extensive collection of fossil bones which furnished to Dr. Leidy the materials for his splendid memoir on the "Extinct Fossil Fauna of Nebraska." At the same time he collected a large and elegant series of Cretaceous fossils, some of which were described and figured by Dr. Owen in his final report on the Geology of Iowa, Wisconsin and Minnesota. The notes made by Dr. Evans on the geological features of that remarkable region were likewise of the highest interest, and from these Dr. Owen has compiled one of the most instructive and beautiful chapters to be found in his valuable report. In addition to his scientific duties, Dr. Evans had almost exclusive control of the business department of Dr. Owen's survey, which of itself involved an immense deal of labor. The satisfactory manner in which he discharged these onerous duties, often in the midst of disheartening privations and even danger, commanded the highest esteem and confidence of Dr. Owen and his associates, while his goodness of heart, uniform courtesy, and self-sacrificing disposition, secured to him their warmest friendship.

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Collected by the Survey.

Fruit 1.0-1.0 in

0.9-1.1

4-7

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* To Dr. Hiram A. Prout is justly due the credit of having first called attention to the existence of such remains in that region by his excellent memoirs of Palæotheroid and other bones, published in Silliman's Journal.

energy of his charac [illegible] but a single man as his escort, and other guide than his compass, he determined to continue on his course. After a wearisome travel of many days, and having encountered many privations and dangers, he and his companion, Cadotte, arrived safely, but in almost a starving condition, at the Flathead Village, situate on the western slope of the Rocky Mountains. In accomplishing this part of his arduous task, Dr. Evans passed directly through the heart of the Blackfeet country, and travelled a distance of more than two hundred miles in the main chain of the Rocky Mountains before he succeeded in finding a passage to the valley beyond. It is much to be regretted that the credit of the discovery of this important pass, which unquestionably belongs to the subject of the present sketch, has been unjustly transferred to another. It should have been named in honor of Dr. Evans instead of Cadotte, since it is well known that the latter person had no knowledge of such a passage, and, in fact, had not even been in that region before he went there under the guidance of Dr. Evans. After a few days' rest at the Flathead Village our traveller resumed his journey, and without encountering further difficulties, reached Oregon city with much valuable information concerning the extensive district of country through which he had passed.

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September 2, 1861.

The President, Dr. ENGELMANN, in the chair.

Seven members present.

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0 1 2 3 4 5 6 7 8 9 10
cm
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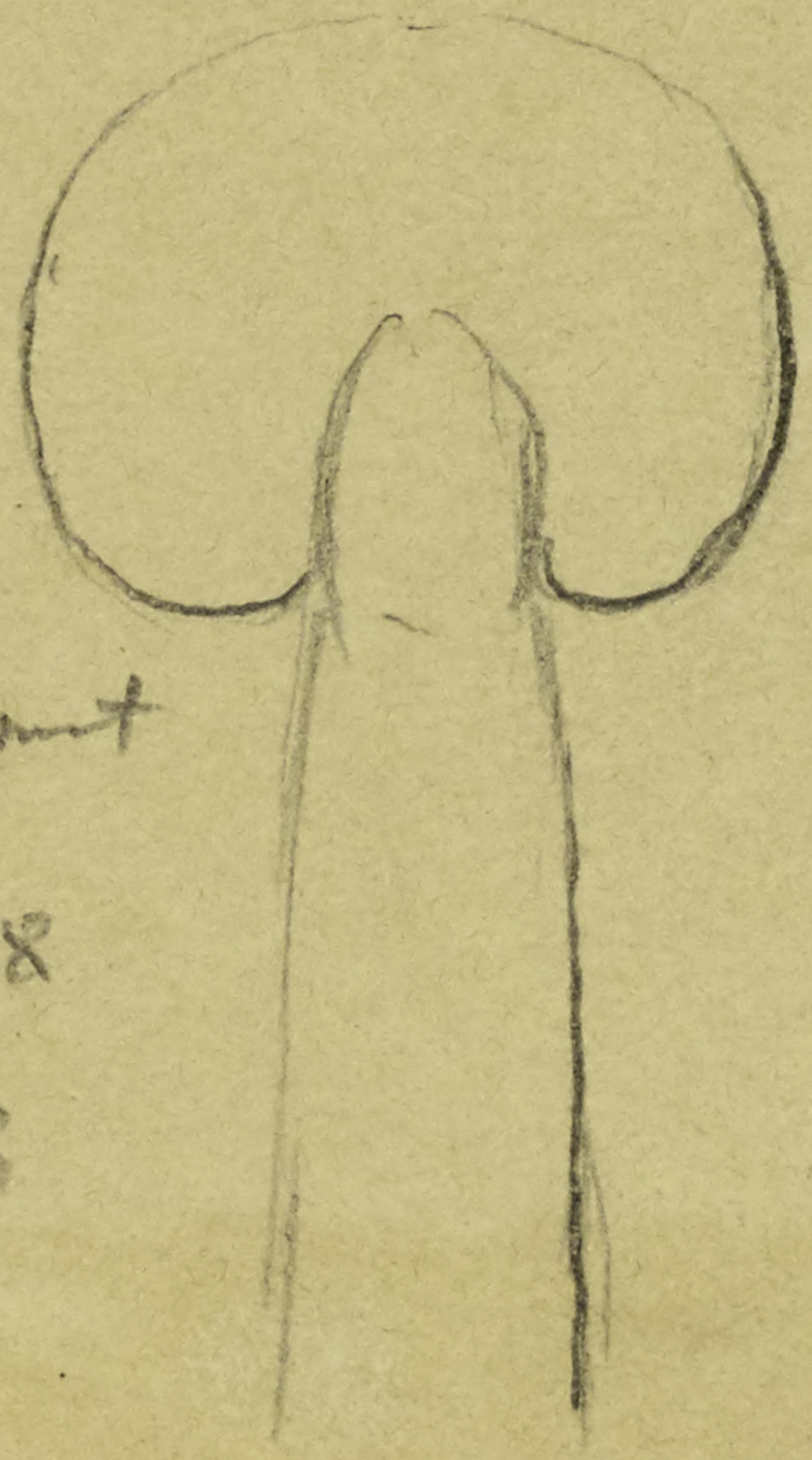
MISSOURI BOTANICAL GARDEN

Callitriche heterophylla April 16 1878

San Luis Potosi, Mexico

Dr Parry March 1878

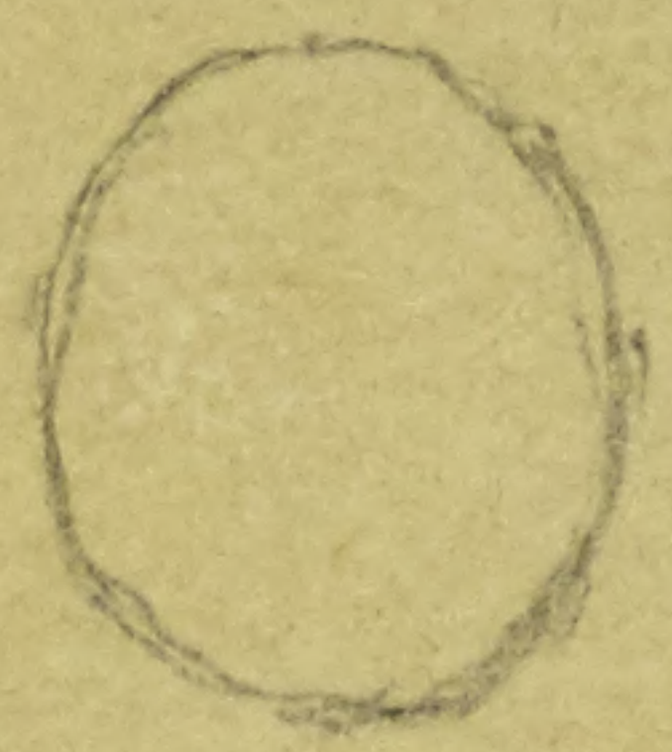
anther x60



anther diamet

$\frac{23}{60} = 0.38$

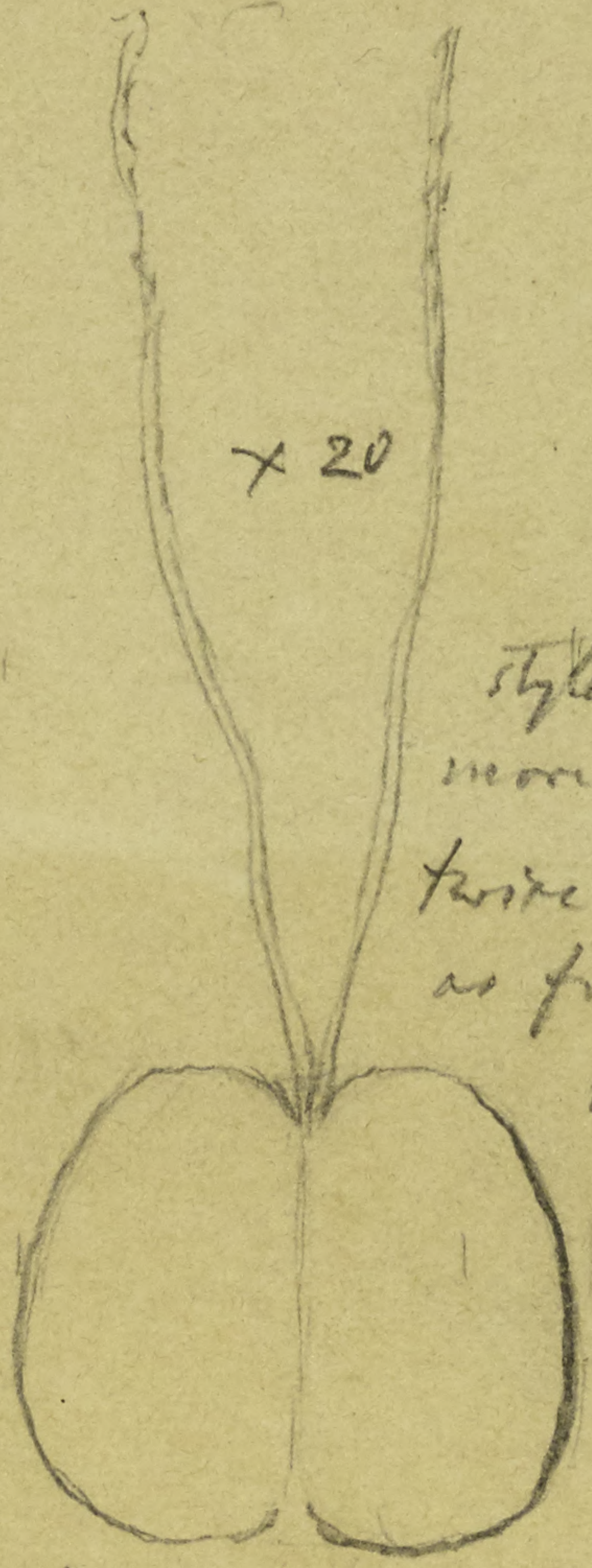
— 0.4



slightly oval 0.024 wide 0.026 long mm

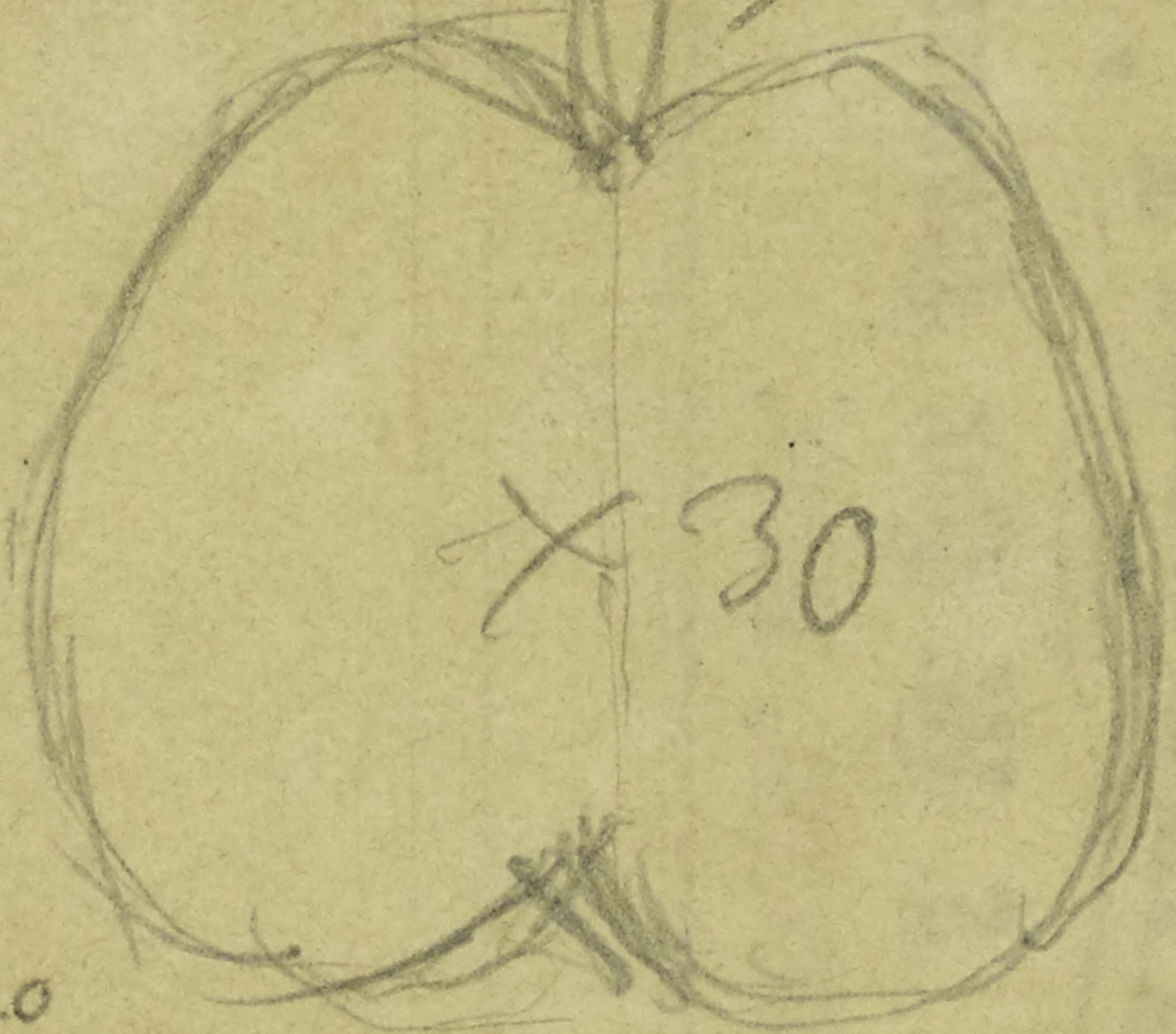
Pollengr x415

x 20

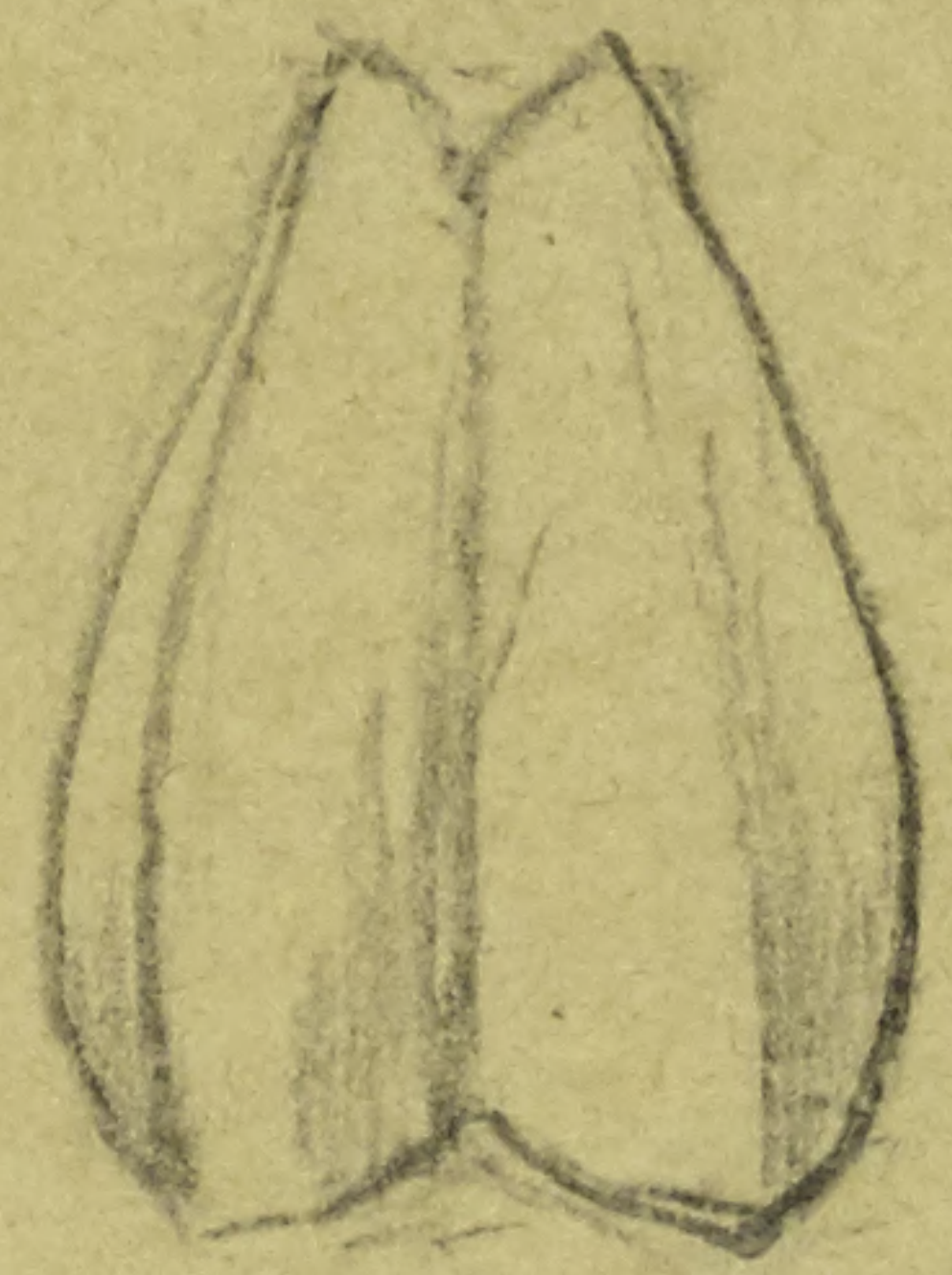


styles more than twice as long as fruit nearly persistent

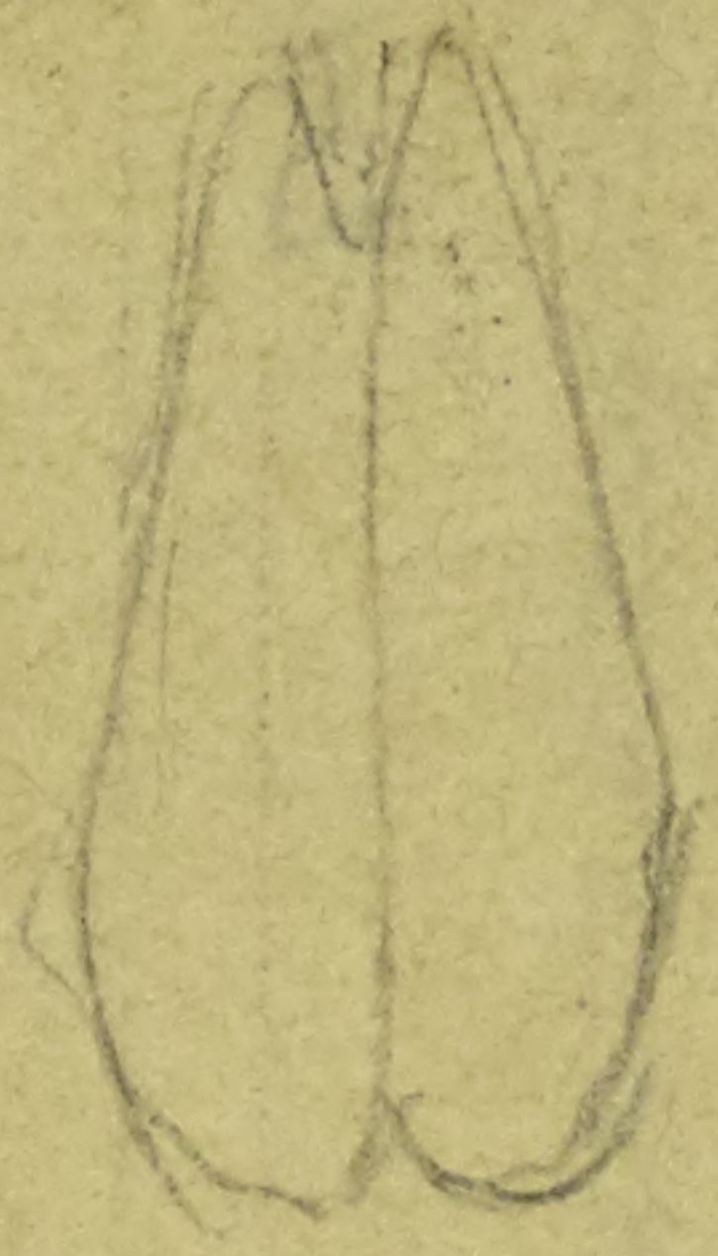
fruit 1 mm high 1.2 wide



x 20



soaked



dry falling into 4 pieces

799

1.2

0 1 2 3 4 5 6 7 8 9 10
cm
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Missouri Botanical Garden

Henry T. Rohlfing,
APOTHECARY,
No. 2600 Laclede Ave., S. W. Cor. Jefferson Ave.,
ST. LOUIS, MO.

No. .... *Date,* *187*

℞

Geo. Engelmann, M. D.,
No. 3003 Locust Street.

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MISSOURI
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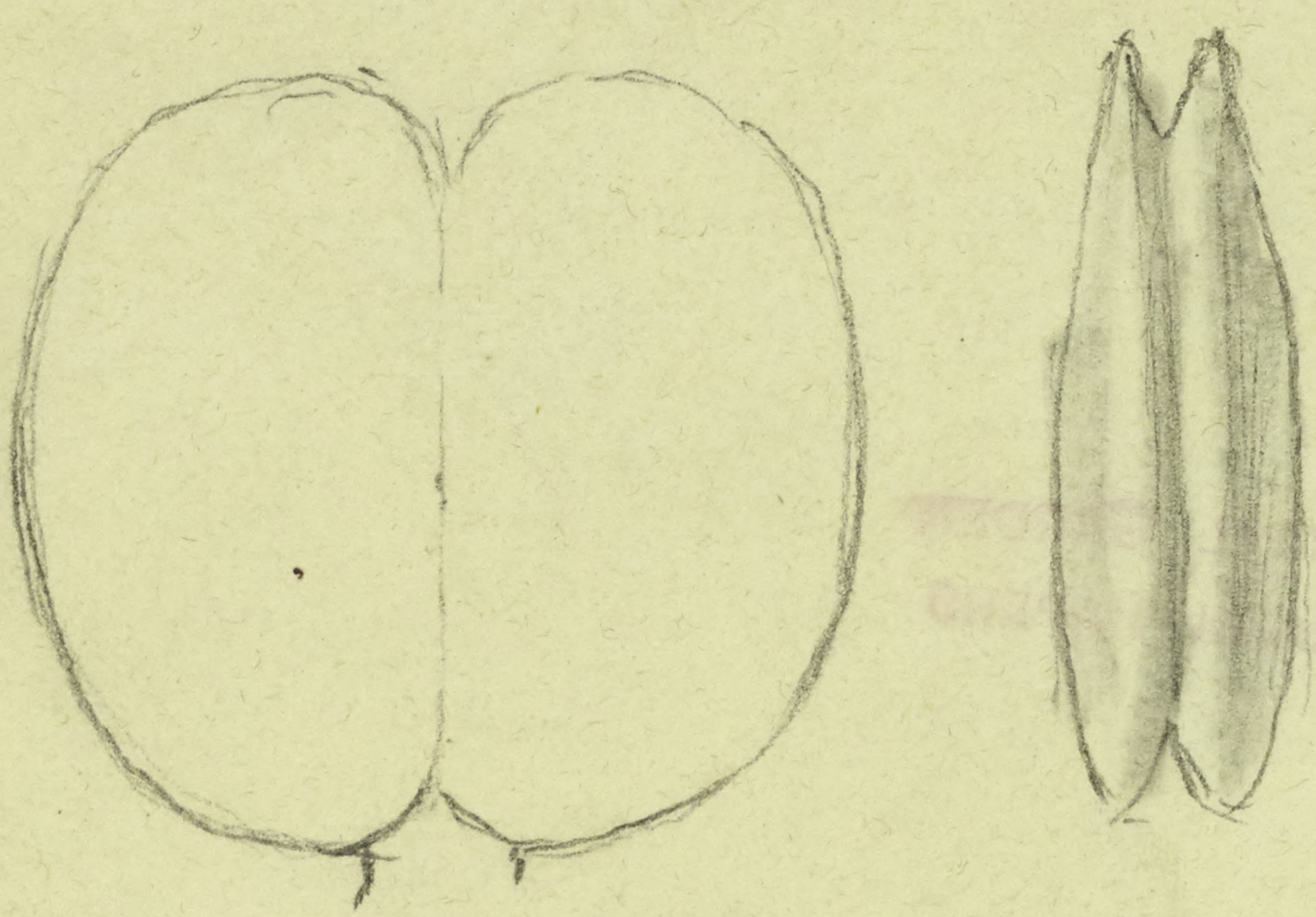
"Call. autumnalis" March 15th 1865

800

White Mountains 1847 E. Tuckerman

evidently the same as spec in Herb Gray from Saco River



unripe seed

$\frac{39 \times 36}{30}$ = 1.3 x 1.1 mm.

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801

Callitriche

"C. autumnalis"

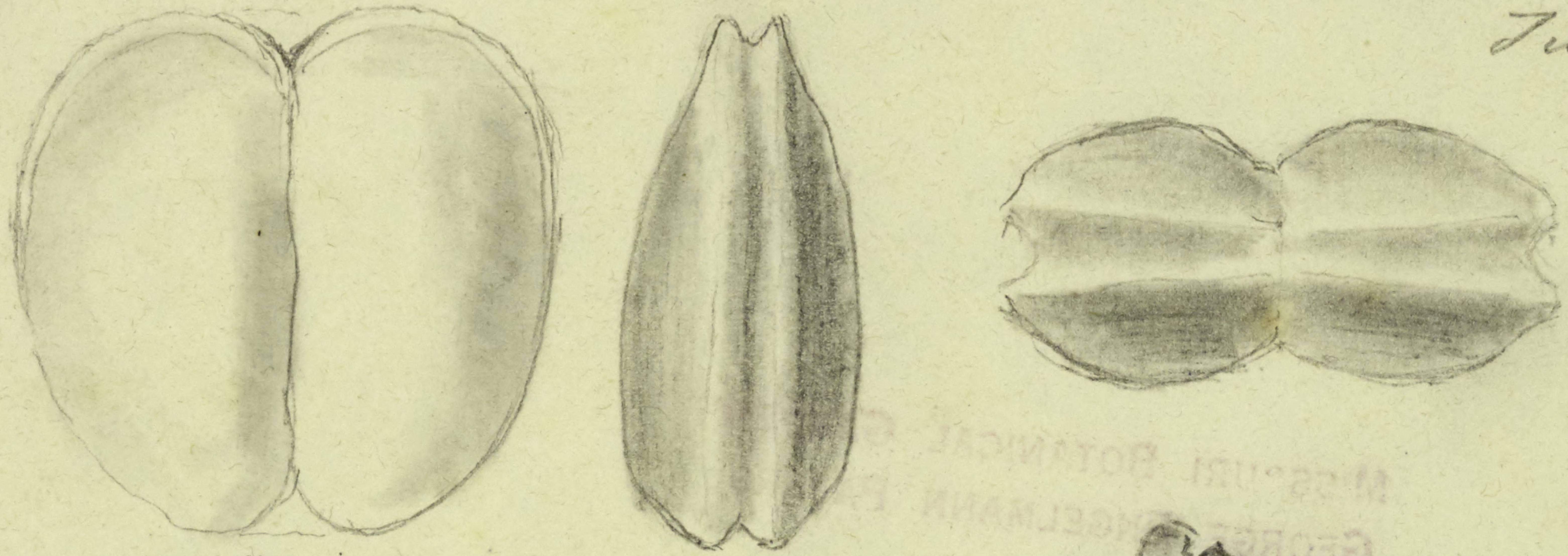
Sept 30 1864

Saco River, White Mountains

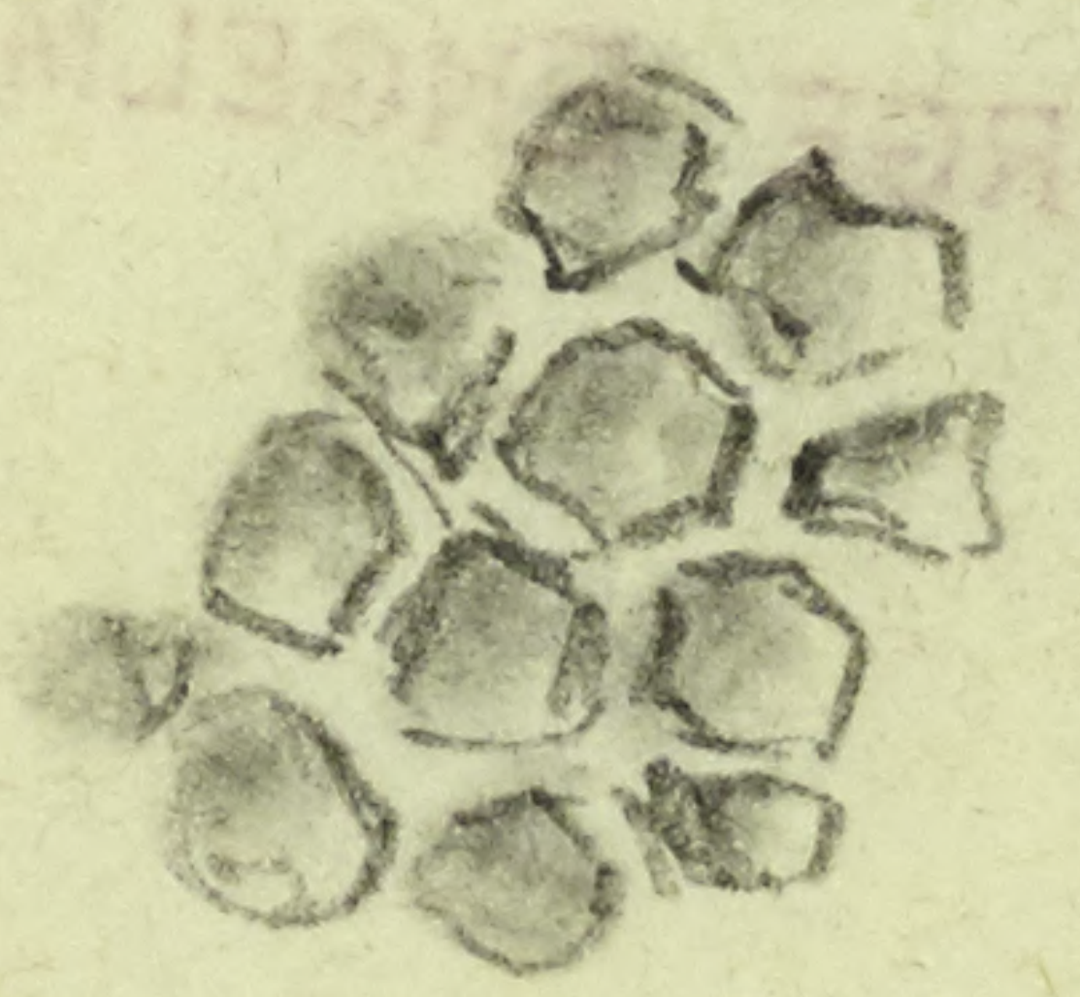
Tuckerman

in Hb Gray

× 30

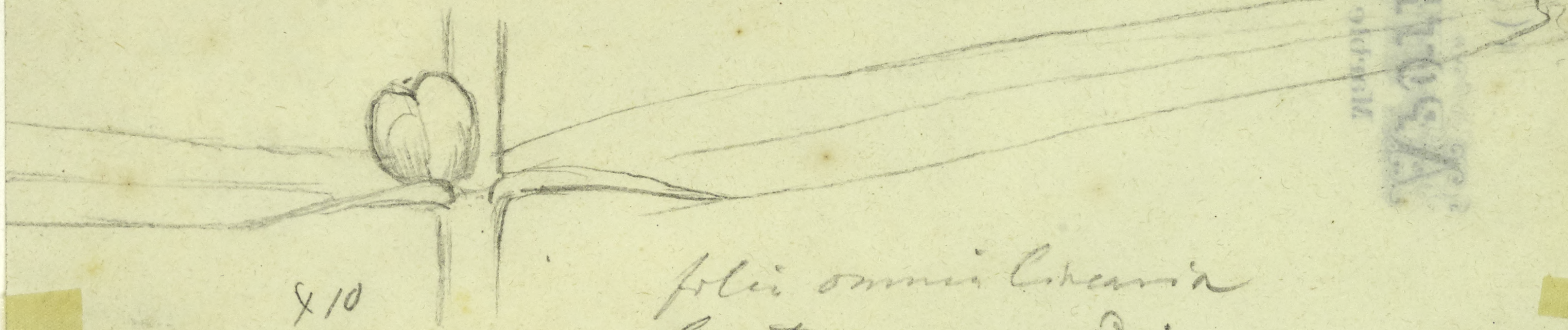


1.1 mm in both
diameters
rim indistinct



Surface

× 150



× 10

folia omnia linearia
bracteas non vidi

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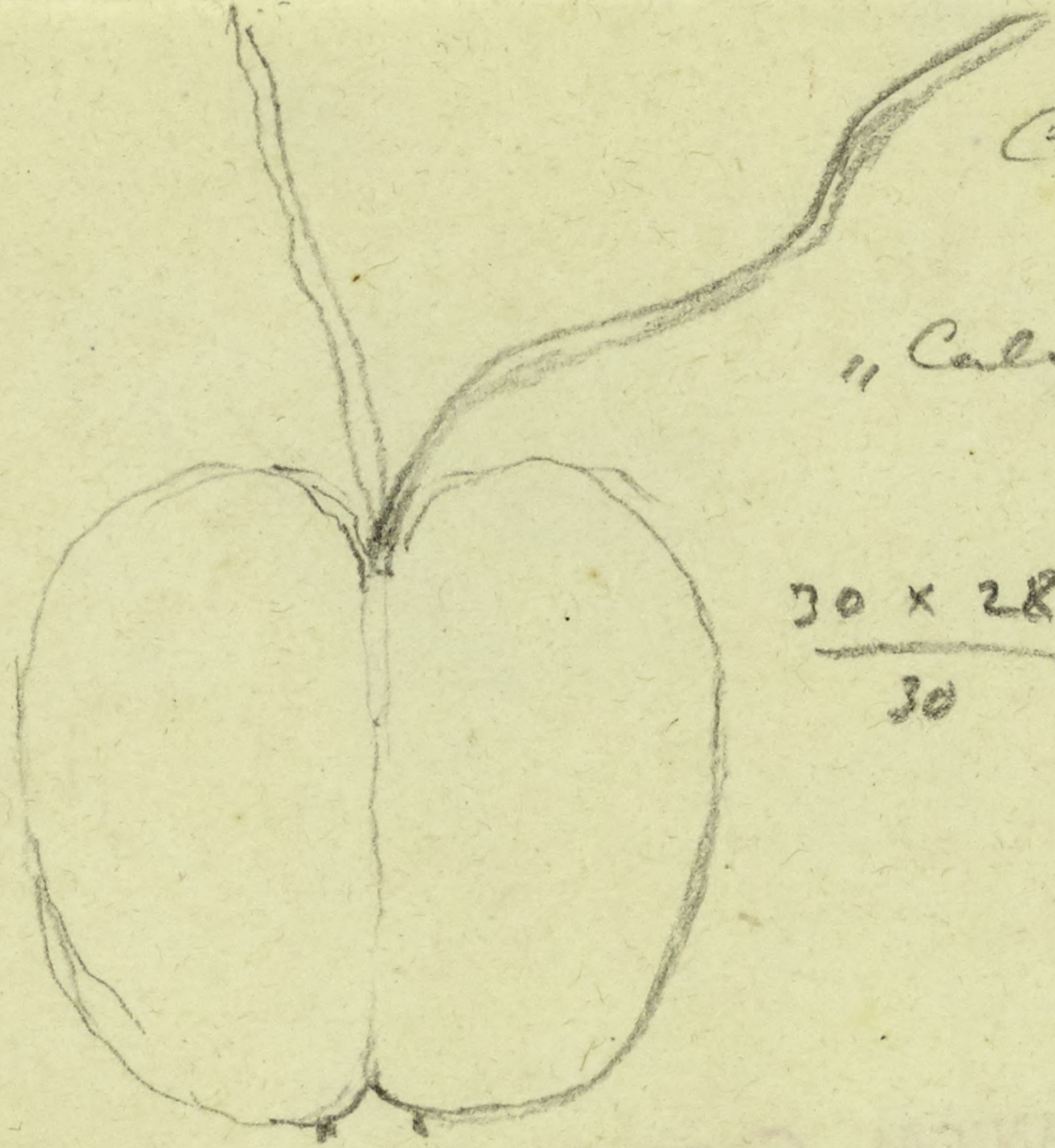
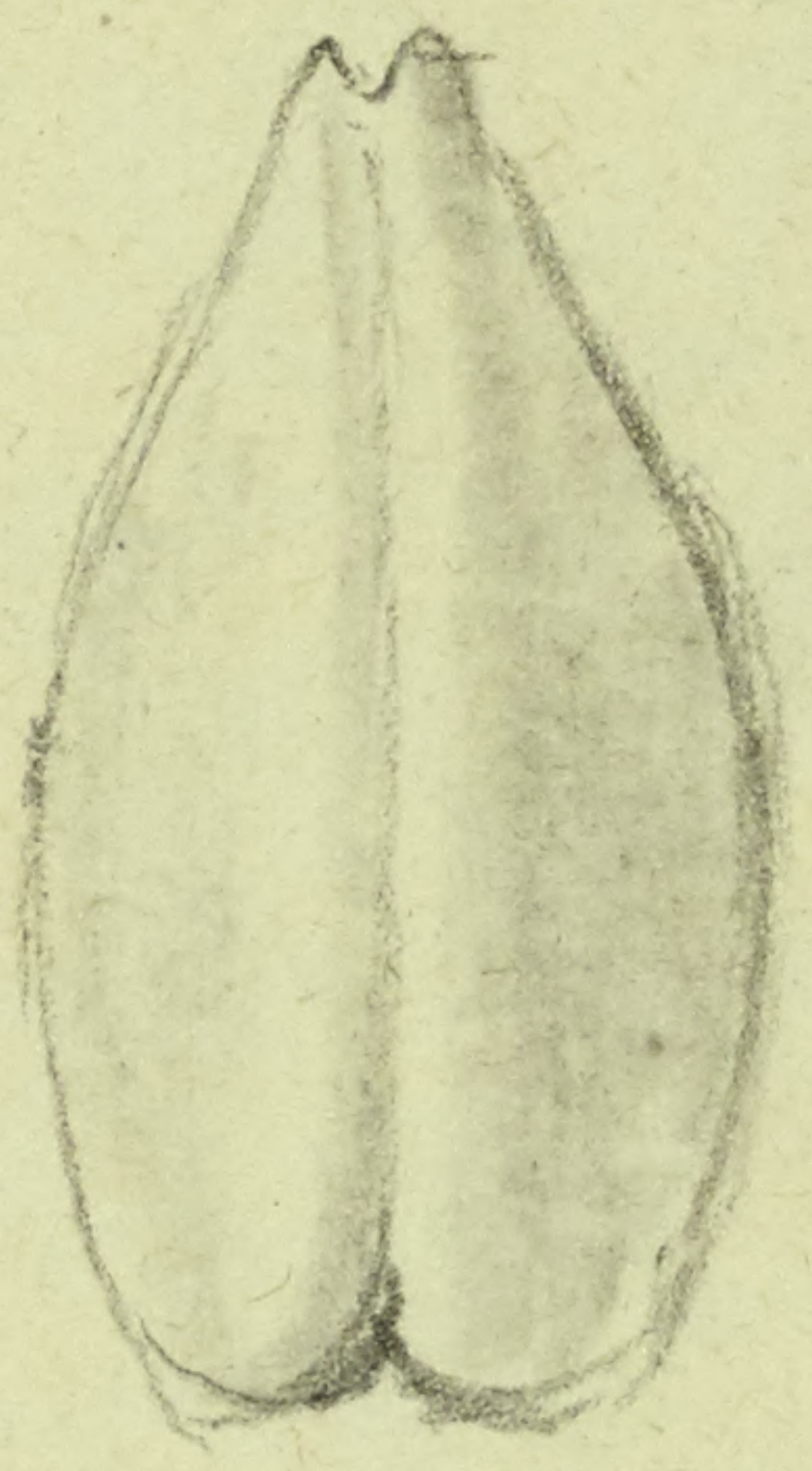
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St Louis, Mo.

March 15 1865



Call. heterophylla
forma genuina
„Californ., Bigelow in Exp. Whipple 185$\frac{3}{4}$

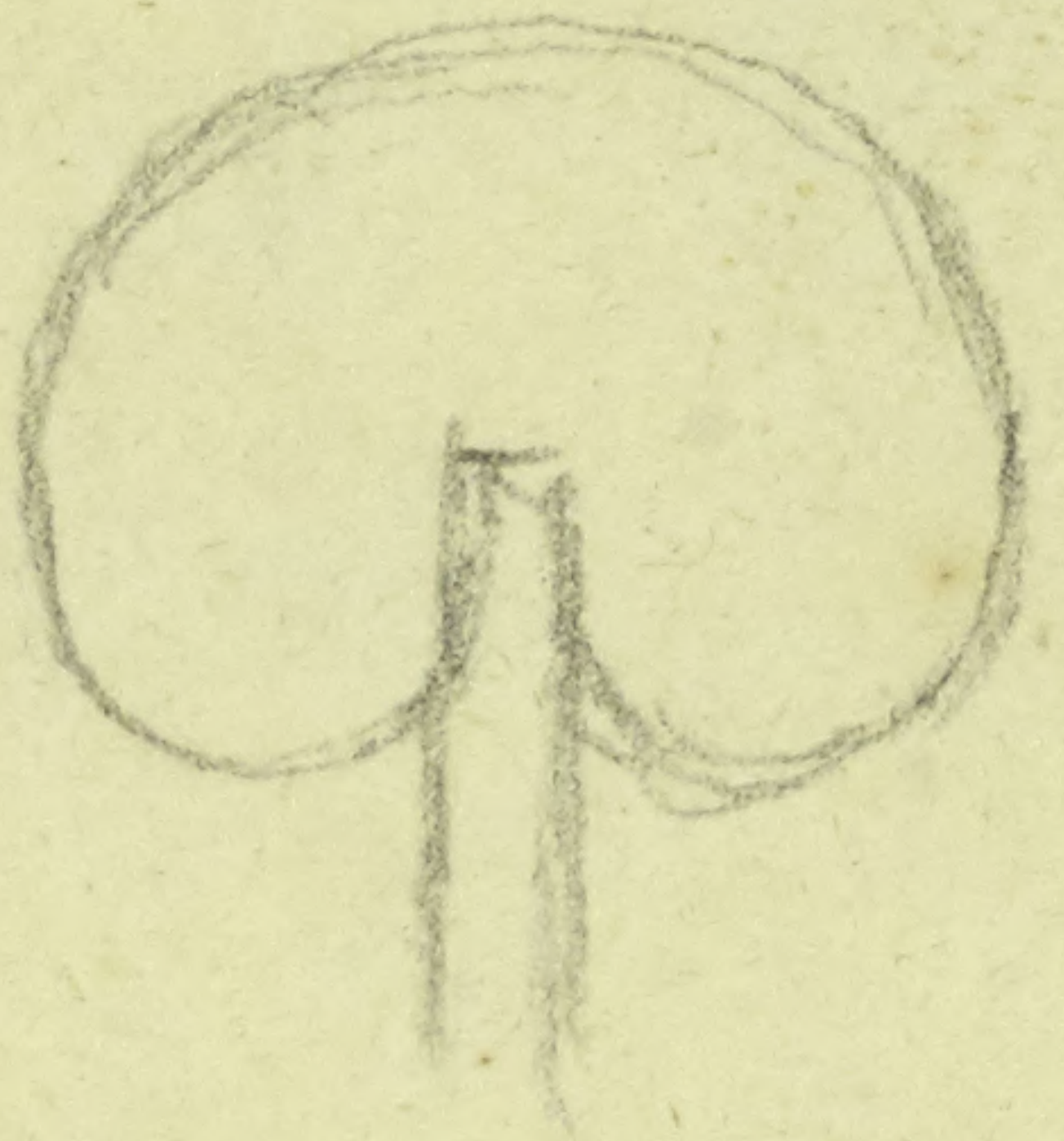
$\frac{30 \times 28}{30}$ = 1.0 x 0,9 mm

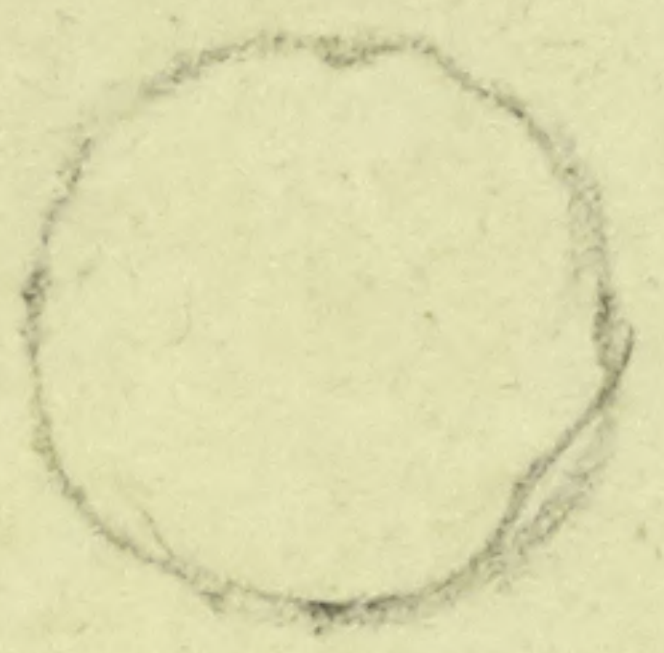


mixed with
C. verna
same locality

Tamul Pass, California
April 11 1854
fide Bot. Whipp. p. 135

x 30





numerous grains examined
and all globose

Pollen x 415
= 0.023 mm
diam

802

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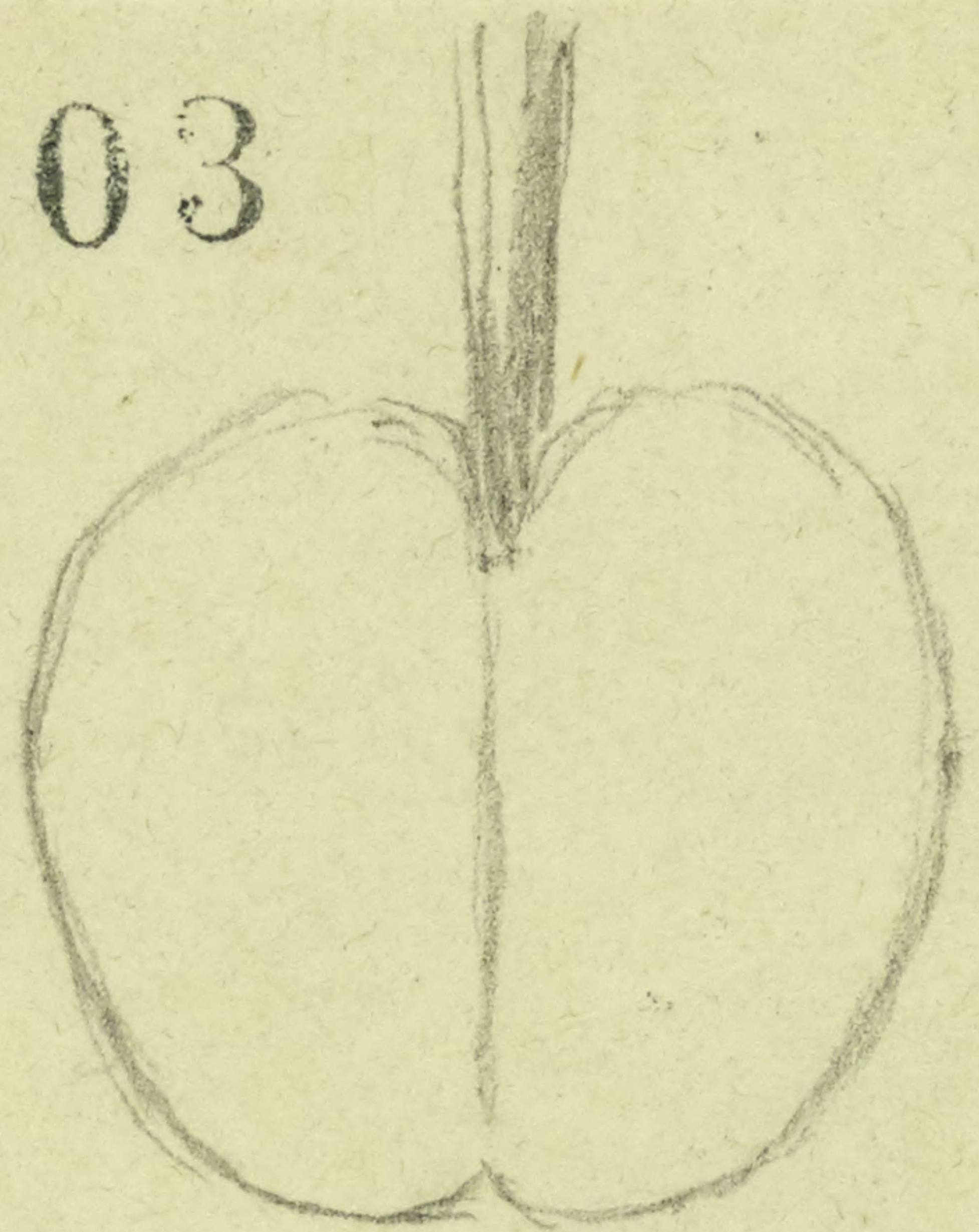
803

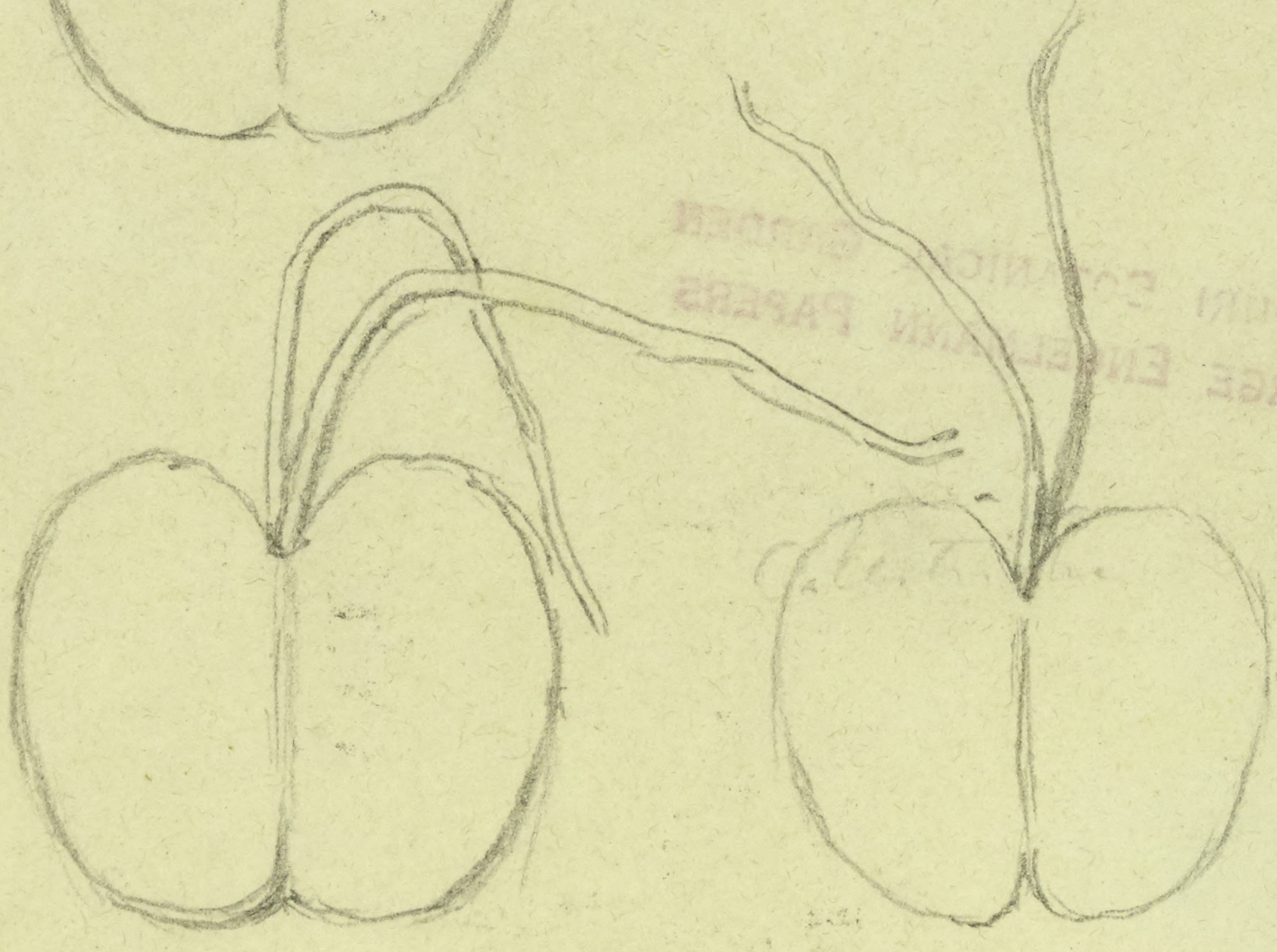
Callitriche Asae Grayi — Octob 9 1862

West Chester, Darlington, in Hb Short

forma heterophylla macrocarpa



$\frac{29 \times 27}{30} = 1.0 \times 0.9$ mm



"Callitriche montana n. sp." "Cask kill" [sic!] Rafinesque in Hb Durand

$\frac{31 \times 27}{30} = 1.0 \times 0.9$ mm

$\frac{28 \times 24}{30} = 0.9 \times 0.8$ mm

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0 1 2 3 4 5 6 7 8 9 10
cm
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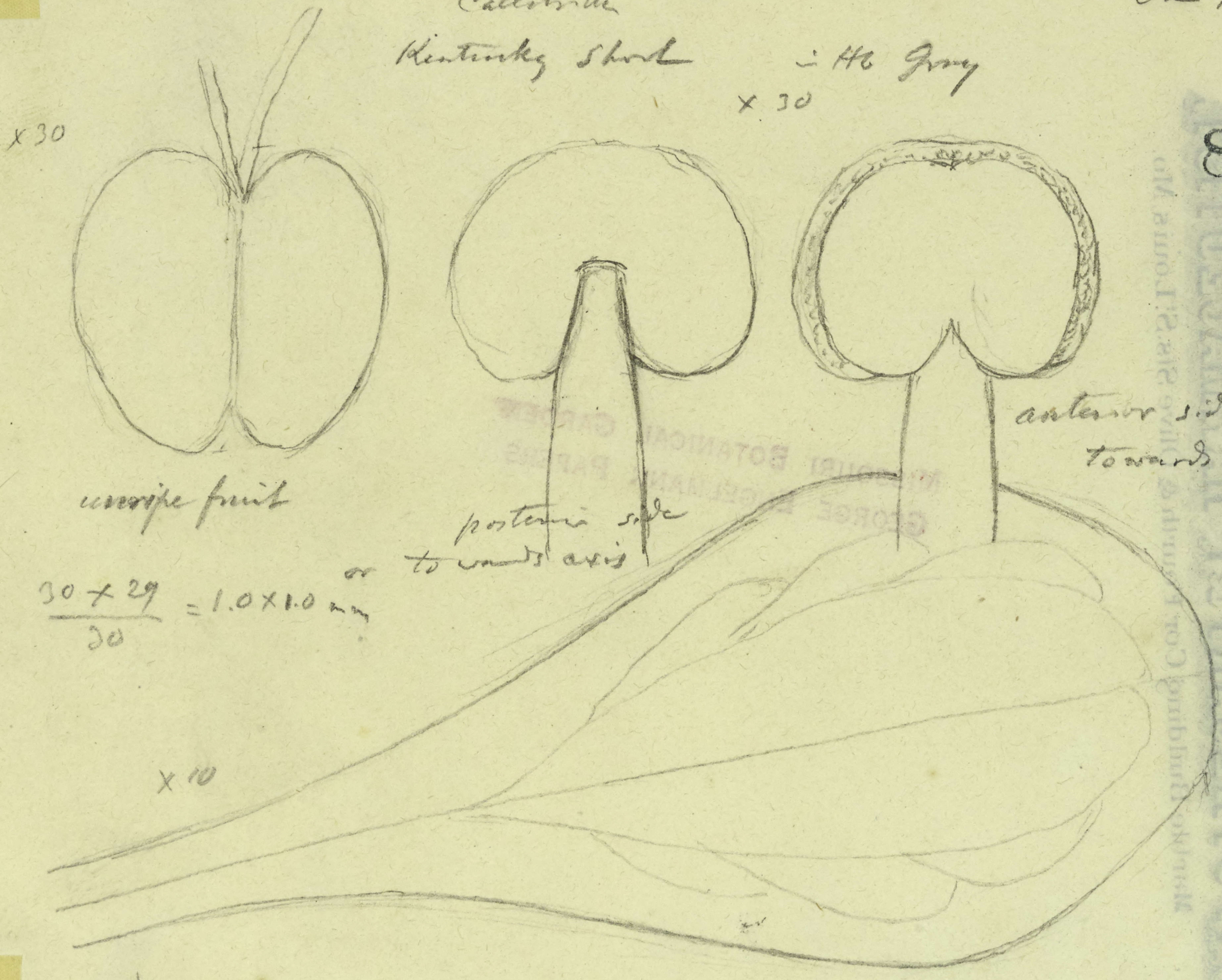
Oct 7 1864

Callitriche

Kentucky Short in Hb Gray

804


x 30
x 30
unripe fruit
posterior side or towards axis
anterior side, or towards leaf
x 10

$\frac{30 \times 29}{30} = 1.0 \times 1.0$ mm

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Callitriche Asae Grayi

~~microcarpa~~ genuina, fruct. paulo majoribus

heterophylla	linearis	brevifolia
Bath Co. Ky. Short 0.9 - 0.7	Edgerton, Hb. Gr. 0.9 × 0.9	Bethlehem Pa Wolle 0.9 - 08
Rockland Co N.Y. Austin 0.9 - 0.9	Hackensack Austin 0.9 - 0.9	Lecha, Moser 0.9. - 0.9
N Braunfels, Wright 0.9 . 0.9		un. itiner 0.8 - 0.8
Catskill Ref. 0.9 . 0.9		Edgerton Hb. Gr. 0.9 - 0.9
New Jersey Hb. Hos Mss 0.9 . 0.8		
Bergen Co N Jers 0.9 - 0.9 - 1.0 Austin		
Bethlehem wolle 0.9 - 0.9		

805

0 1 2 3 4 5 6 7 8 9 10
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ALEX. LEITCH,

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808

805A

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Collection Asa Gray.
Genus [illegible], 1 [illegible] [illegible] [illegible]
8-11
[illegible] 0.9 [illegible]
2. 0.7-0.9 [illegible]

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0 1 2 3 4 5 6 7 8 9 10
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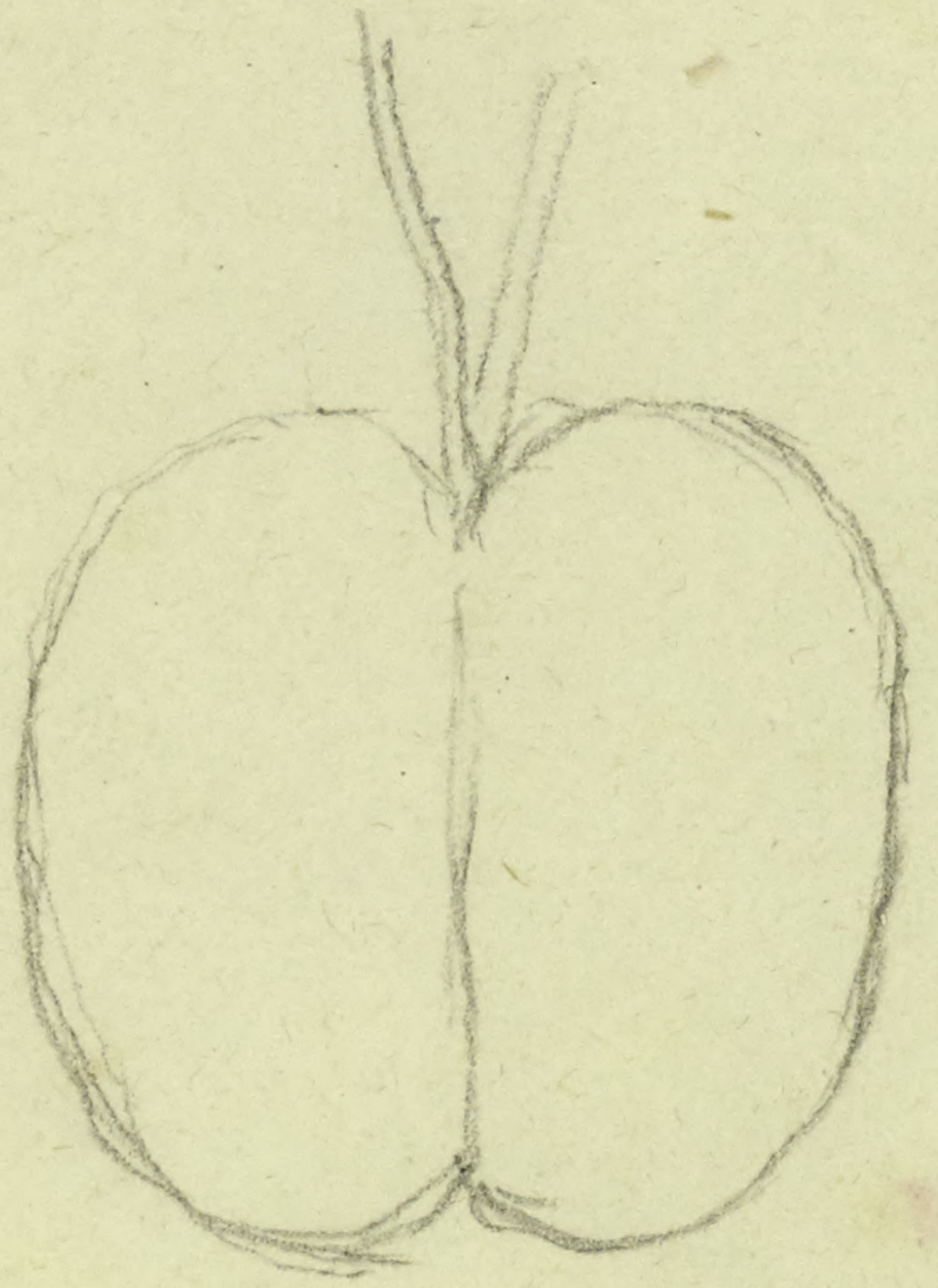
Missouri
Botanical
Garden

March 16 1865

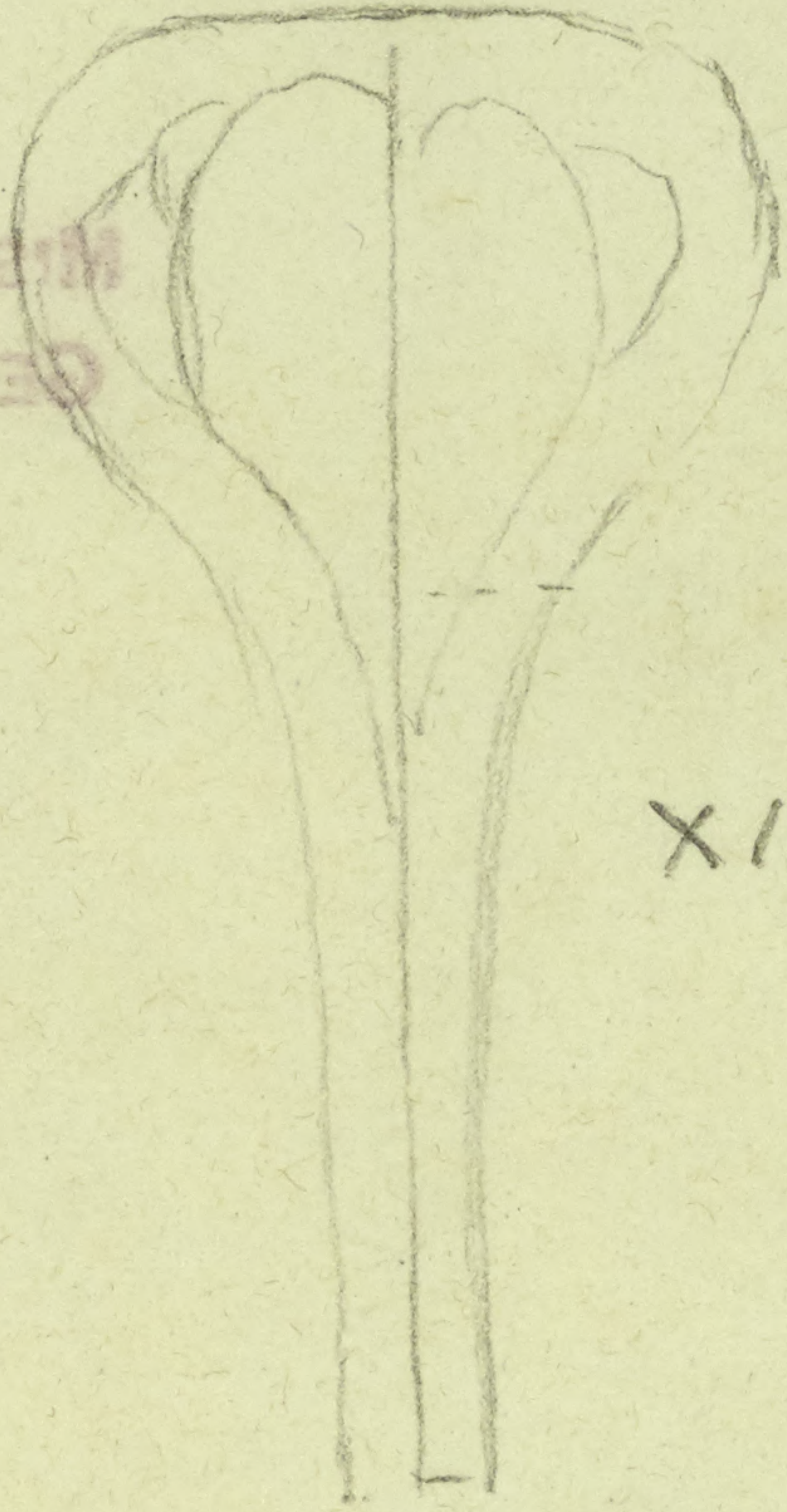
Call. heterophylla
forma aquatica latifolia parvifolia
Wolle, Bethlehem, Pa ♀ Hb Torrey

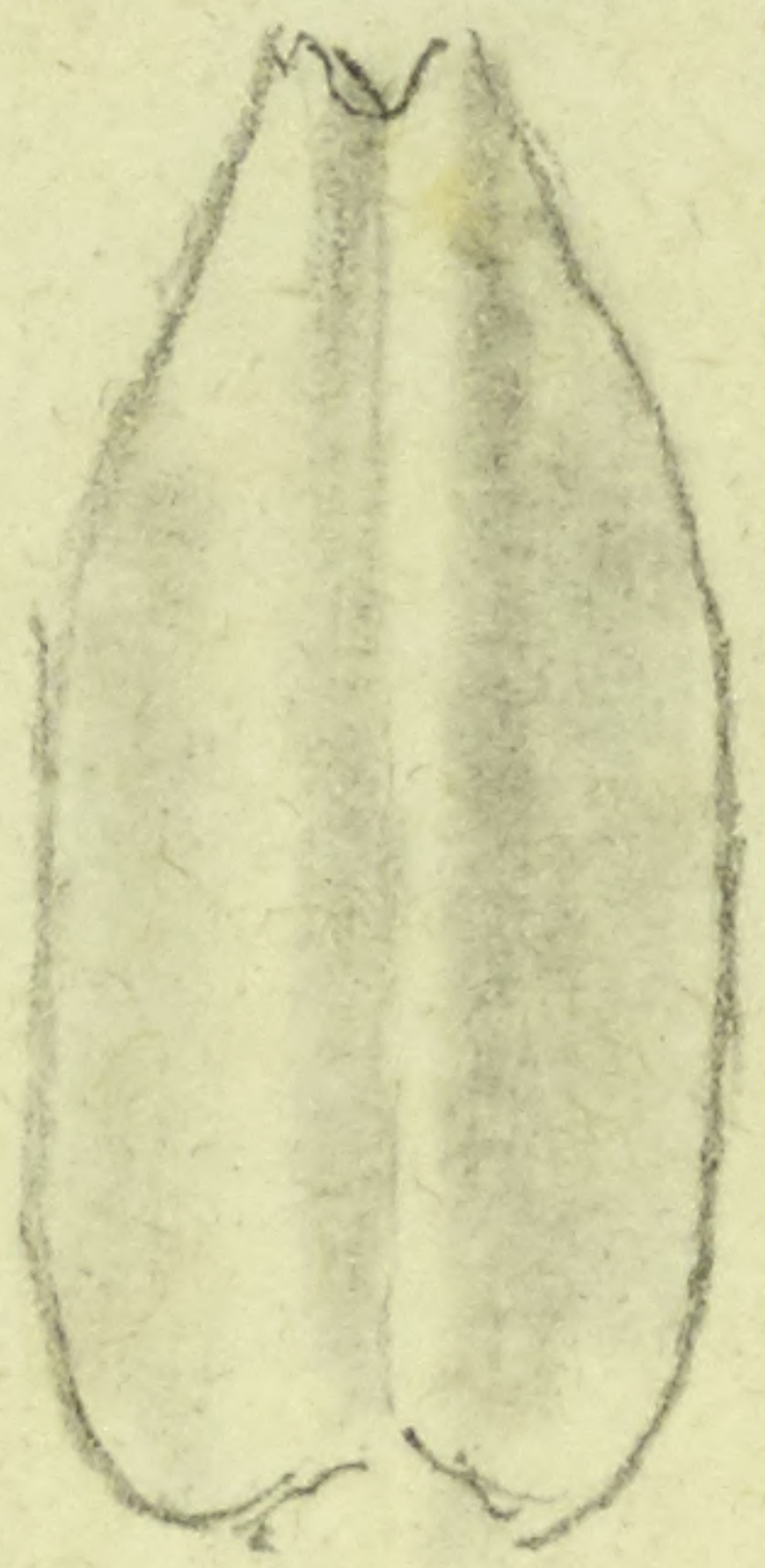
806



$$\frac{28 \times 27}{30}$$

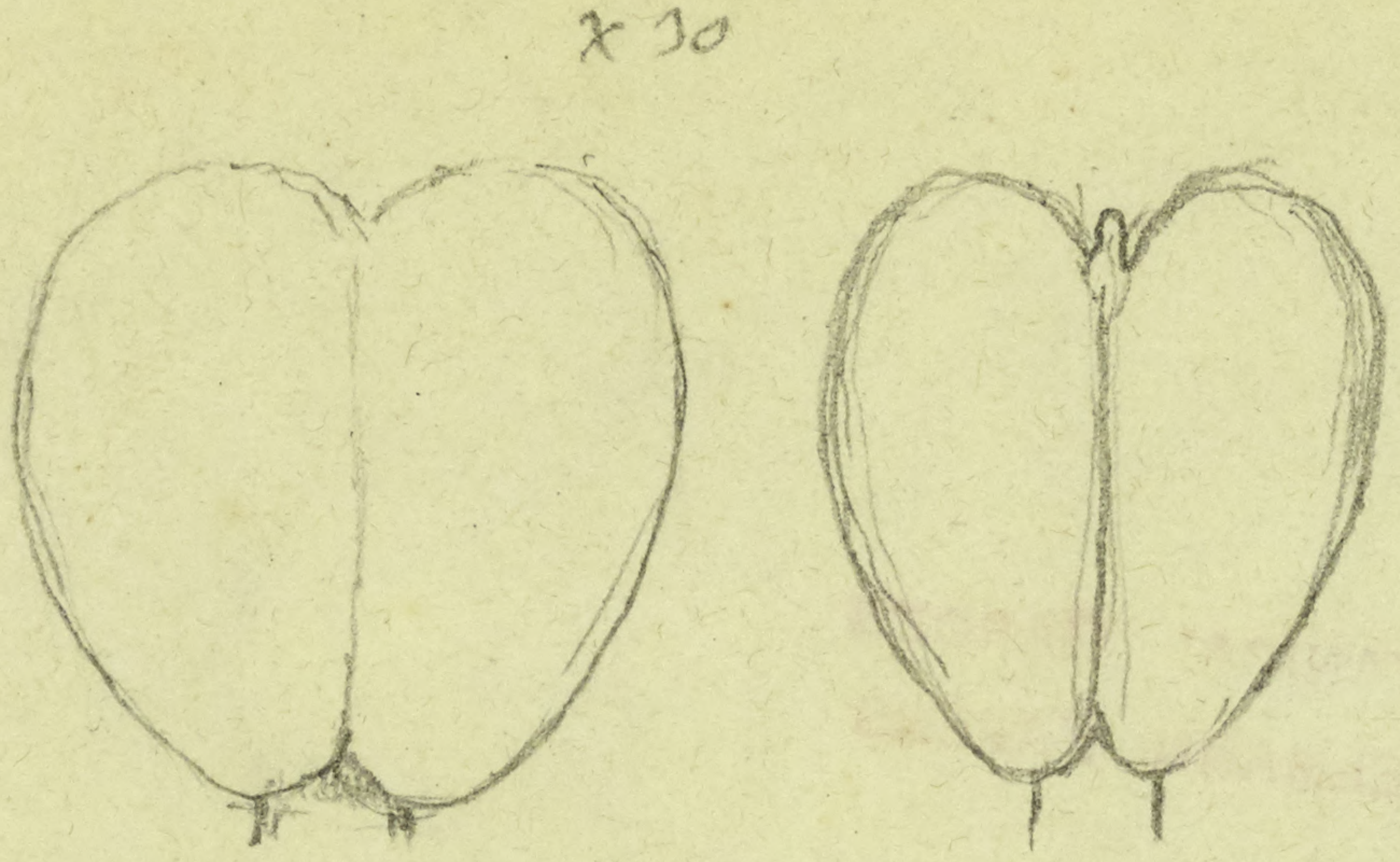
$= 0.9 \times 0.9$. mm





ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

Octob 8 1864

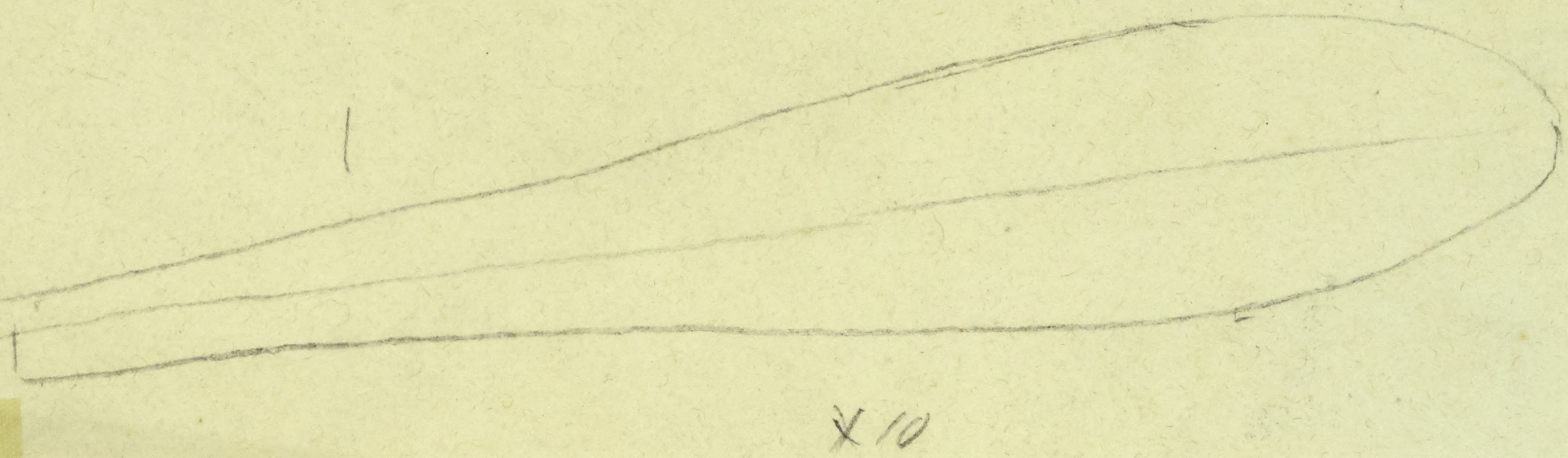


$\frac{27 \times 26}{30} = 0.9 \times 0.9$

"Callitriche autumnalis"
Edgerton – Hb Gray

4 submersed

but leaves not quite linear
rather spatulate-linear
no bracts, no styles



807

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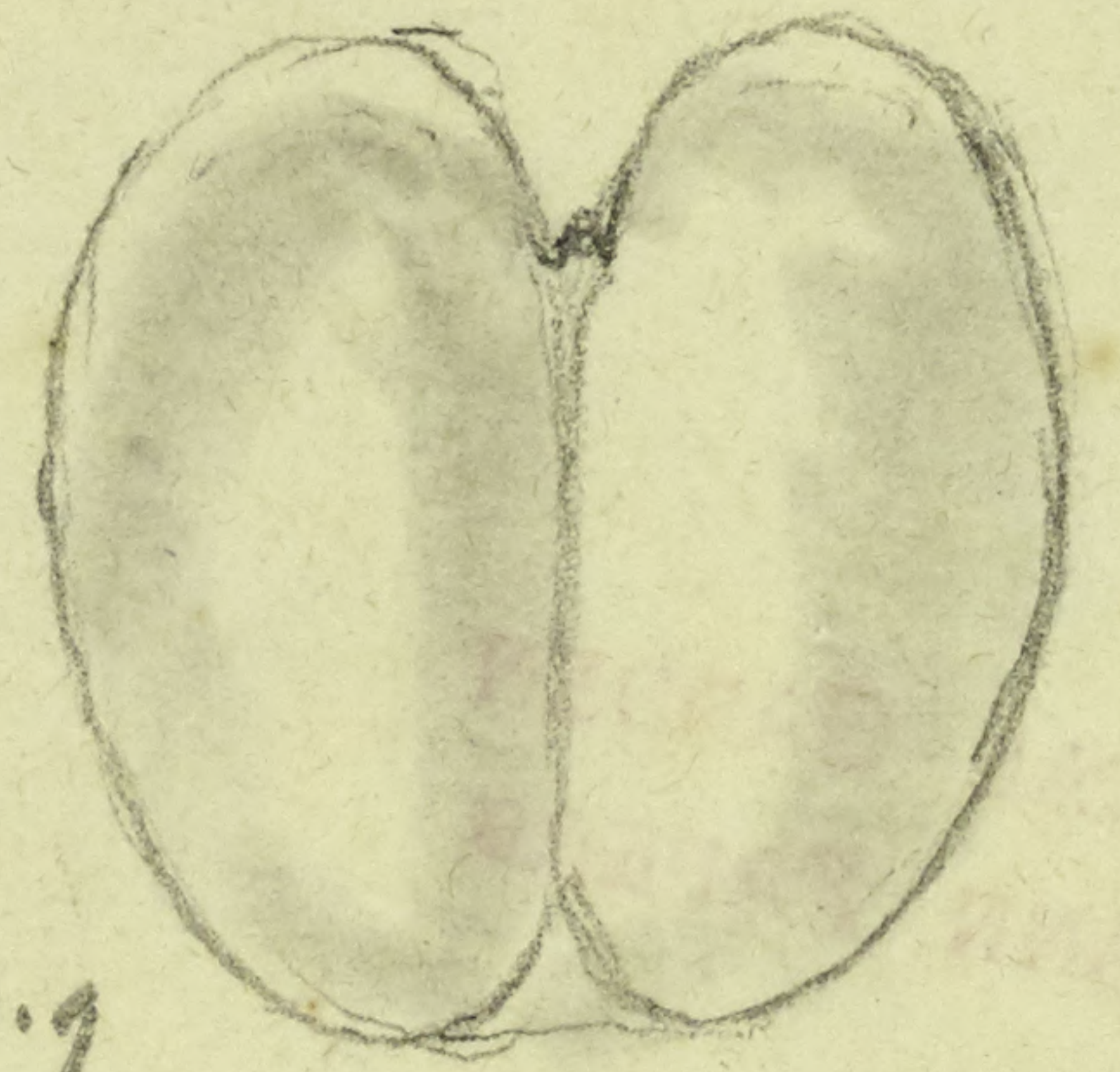
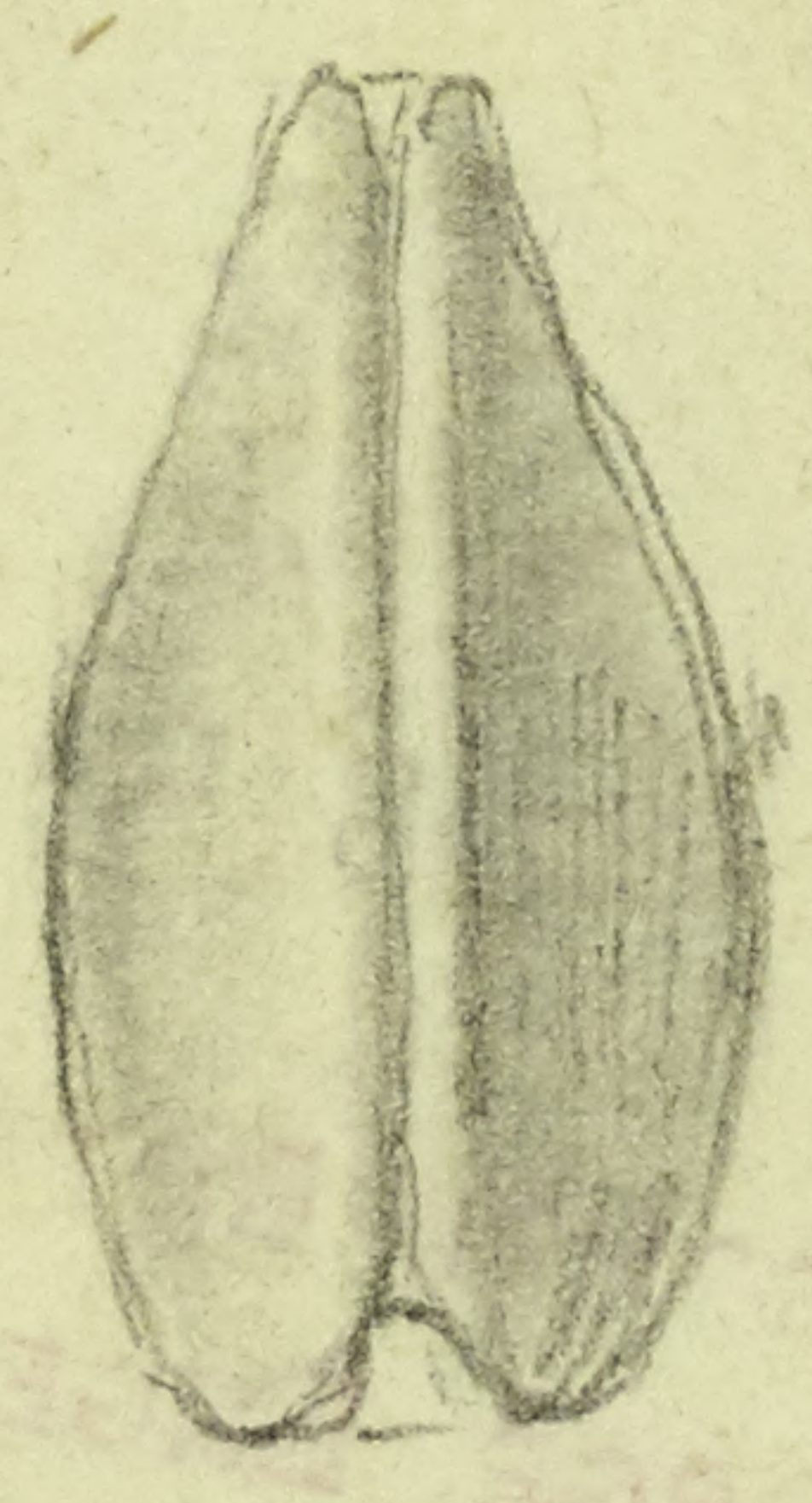
Callitriche Asa Grayi Octob 6th 1864

in water 3-6 feet deep, Hackensack River
Bergen Co NJ
C. F. Austin
Jun 10 1864

X30





26 x 26 / 30 = 0.9 x 0.9 mm

808

submersed, leaves linear 10-18 mm long
fruits often opposite

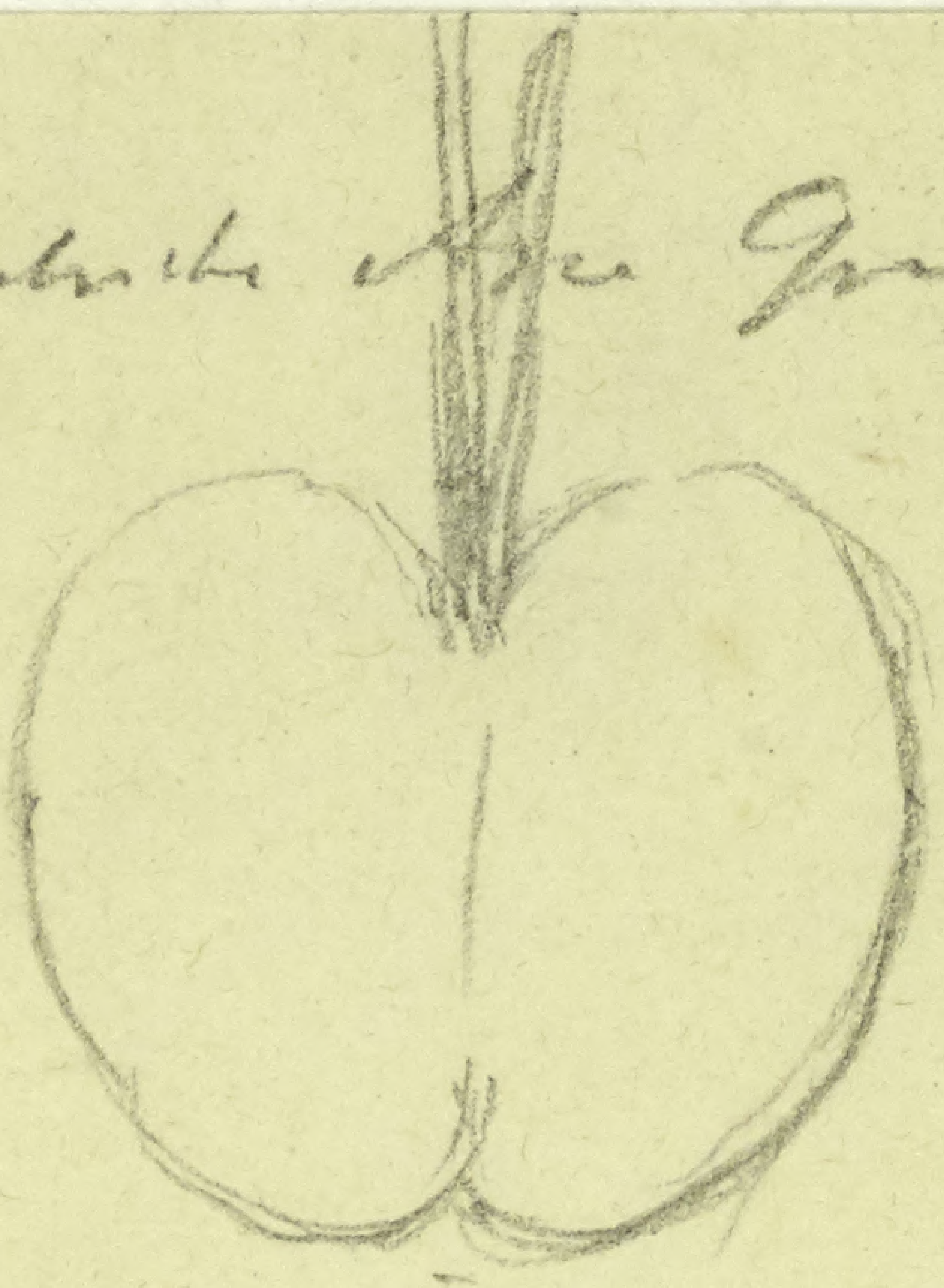
ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

808

Callitriche Asa Grayi

809

Oct. 9 1864



Bath County Kentucky, April & May, Short.
forma heterophylla typica As. Gr?

$\frac{22 \times 26}{30} = 0.7 \times 0.9$ mm

TCH,

RMACEUTIST,

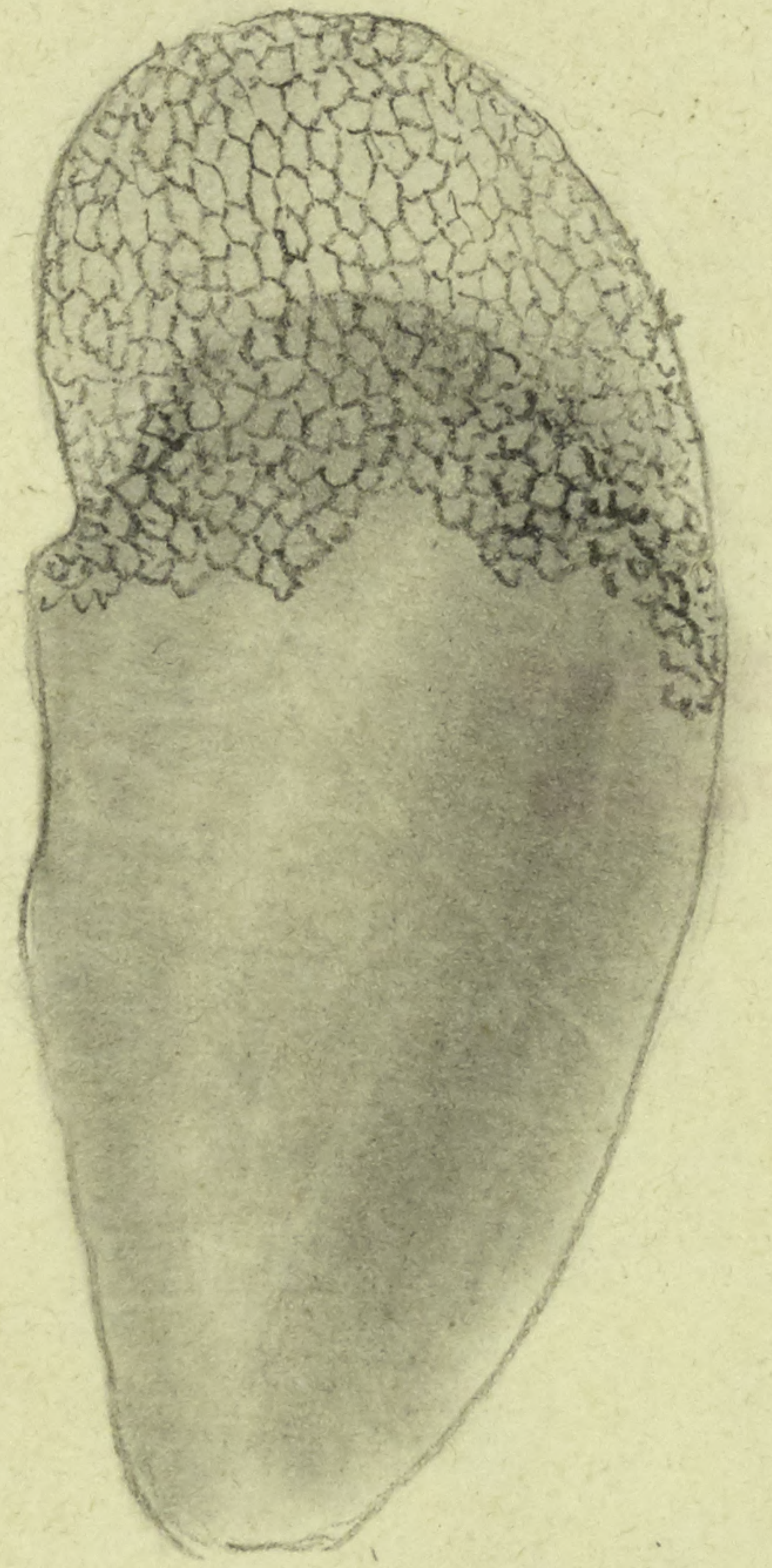
live Sts. St. Louis, Mo.

Callitriche Asae Grayi
from exsiccated water hole

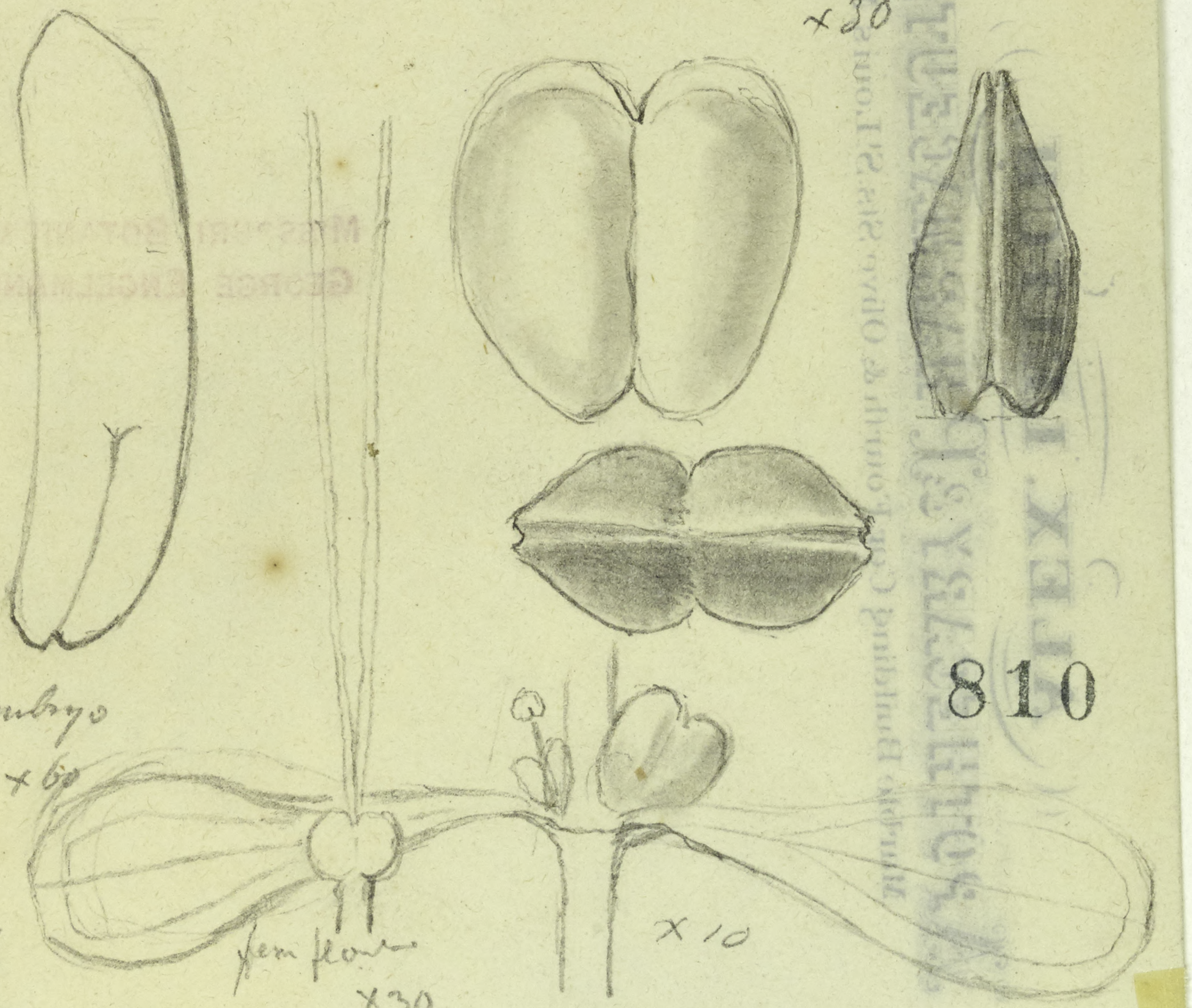
Rockland C. N.Y.
July 1864 C F Austin

Octob 5 1864

fructu majore, apice magis
compresso non cristato



a single nut, soaked
upper part empty and
half transparent.



Sometimes quite peduncled

fruit 0.9–1.0 mm high
0.8–0.9 mm wide

810

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
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MISSOURI BOTANICAL GARDEN

ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St Louis, Mo.

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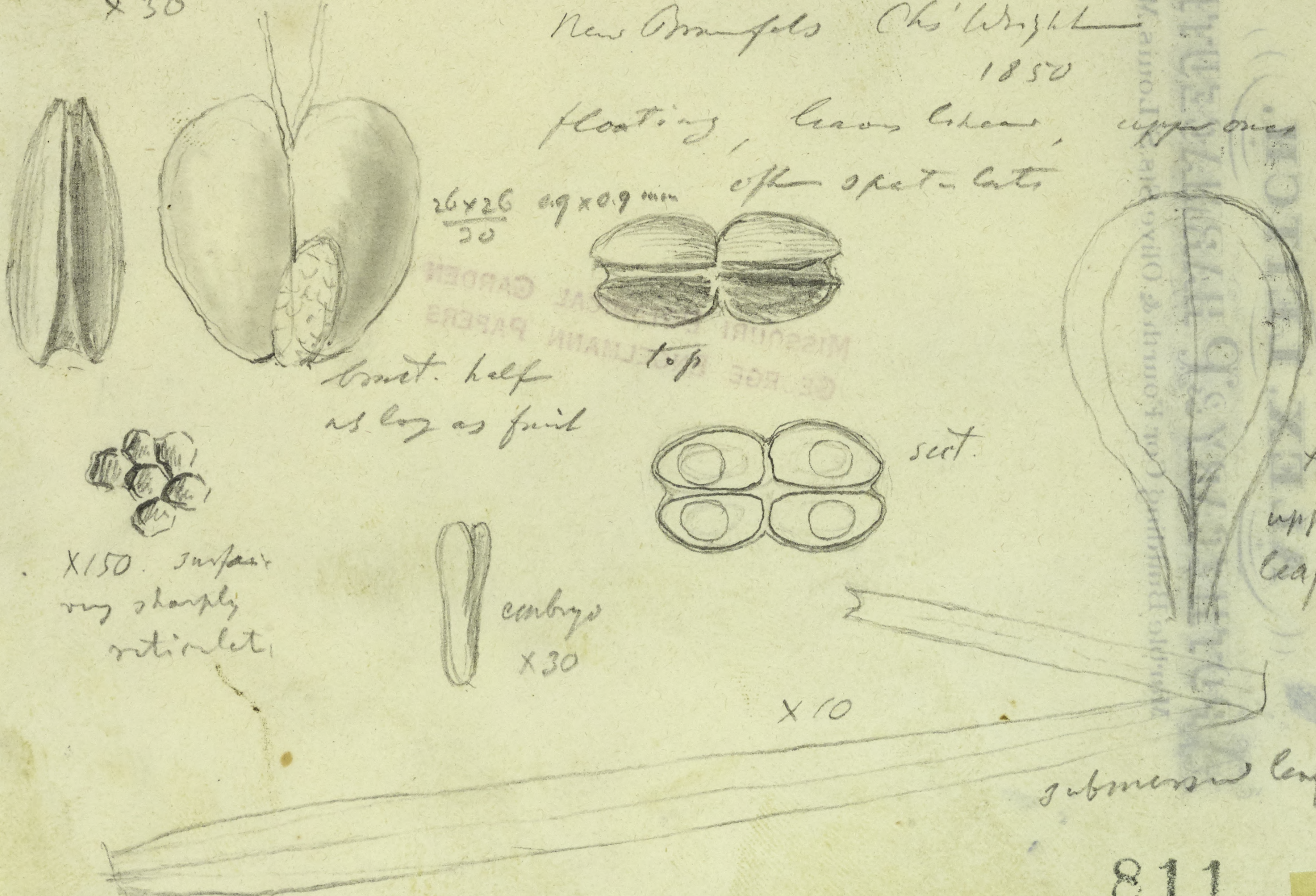
GARDEN

Sept 2^{d} 64

New Braunfels Chs Wright
1850

floating, leaves linear, upper ones often spatulate


x 30
$\frac{26 \times 26}{30}$ 0.9 x 0.9 mm
top
sect.
embryo
x 30
x 10
upper leaf
x 10
submersed leaf

bract half as long as fruit

x 150 surface very sharply reticulate

811

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GARDEN

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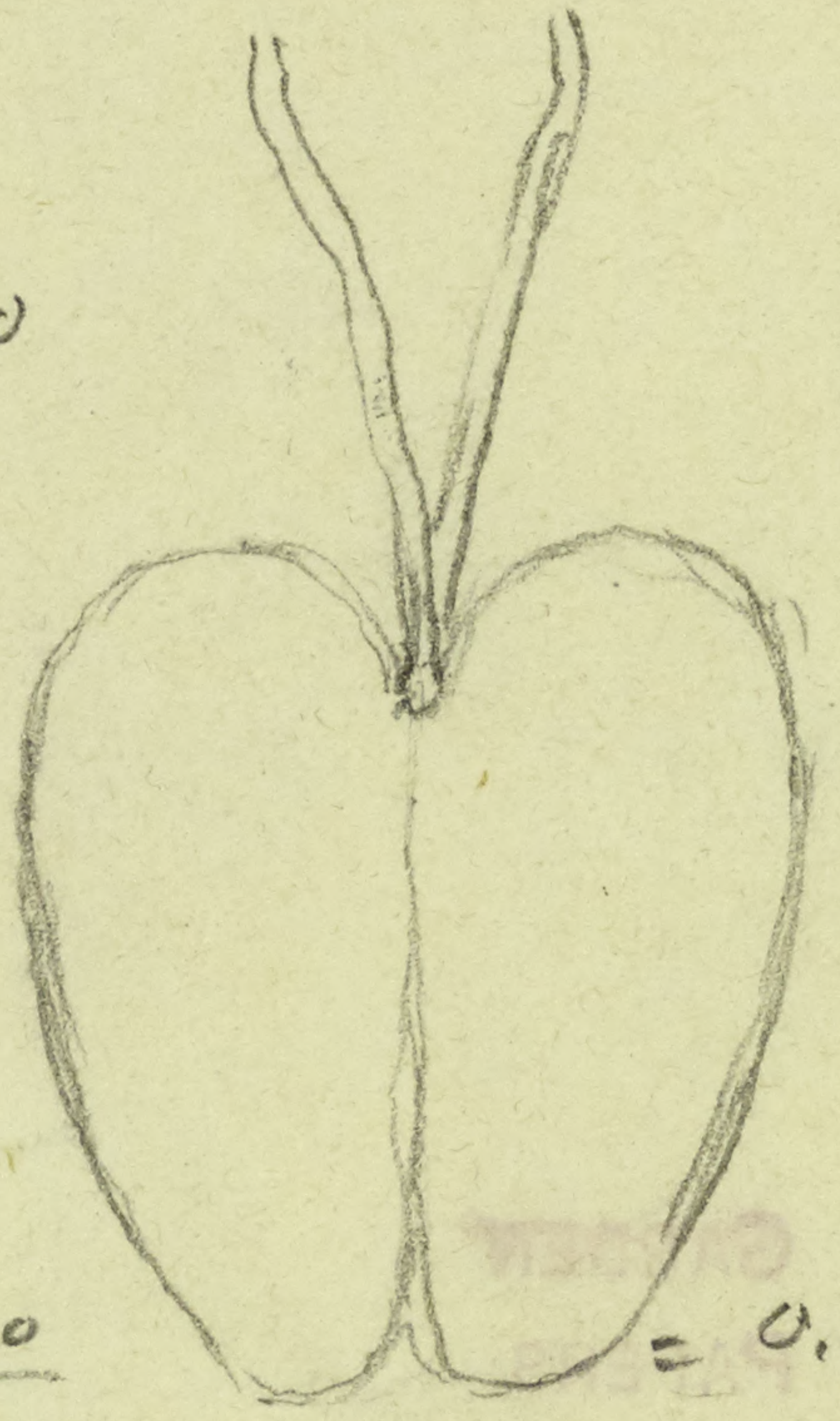
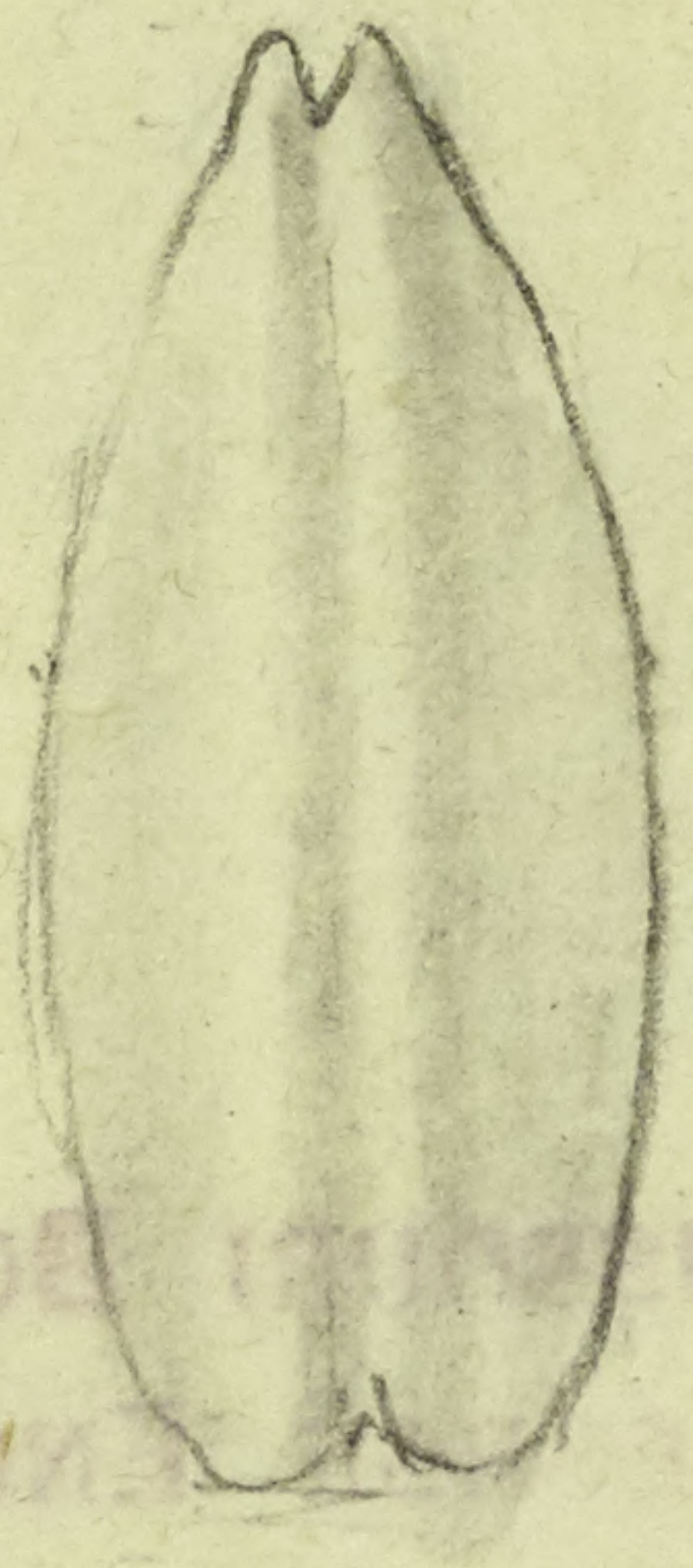
Call. heterophylla
forma natans
Bergen Co N Jersey
Austin in Herb. Torrey.

March 15 1865

812

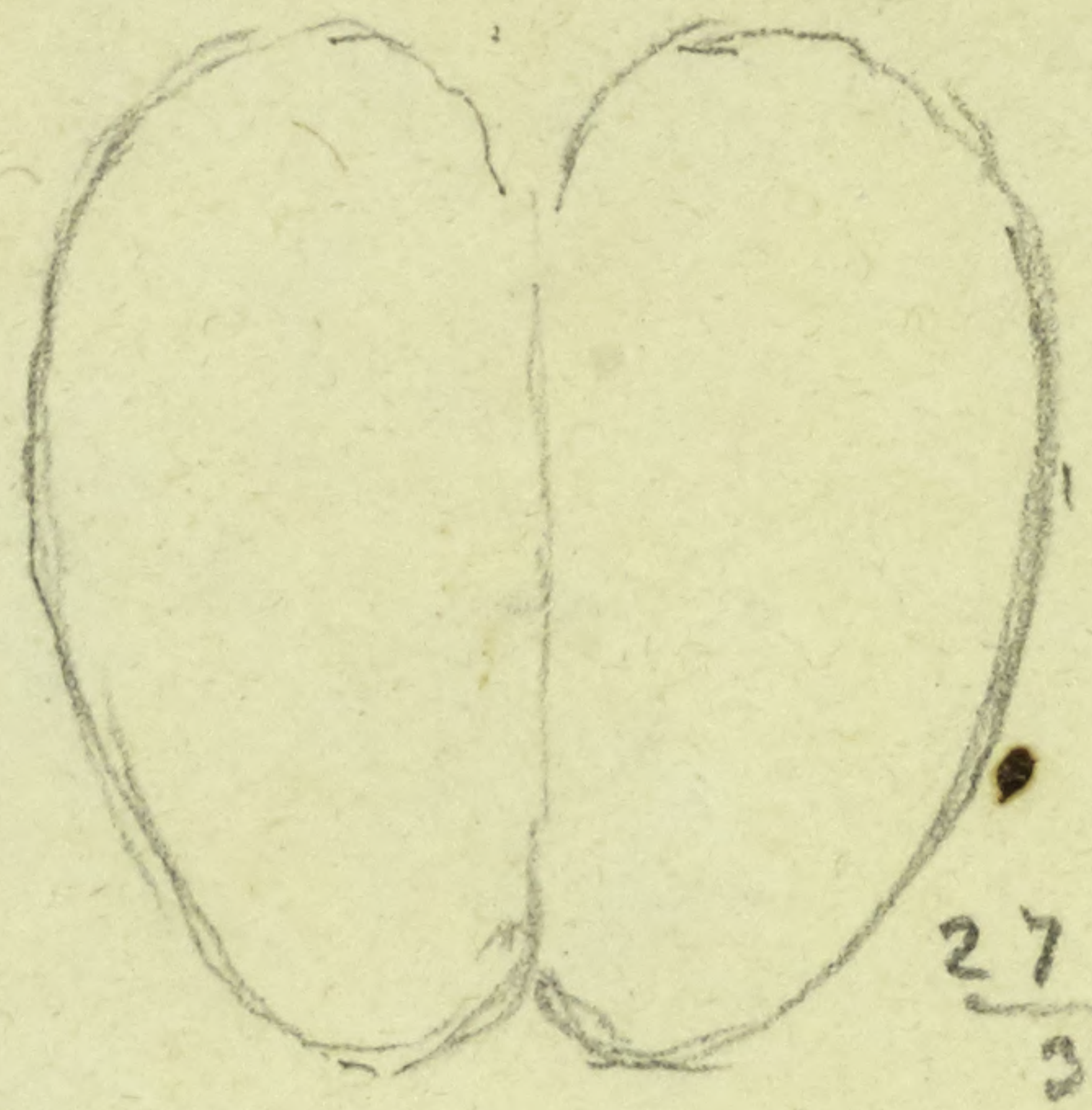
x 30





$\frac{27 \times 30}{30} = 0.9 \times 1.0$ mm

Both fruits are from same specimen, but most fruits were rather obovate, like the upper one, higher than broad



$\frac{27 \times 28}{30} = 0.9 \times 0.9$ mm

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